

SAMSUNG

GSM TELEPHONE

GT-i9023

SERVICE *Manual*

GSM TELEPHONE

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Notice

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**SAMSUNG
ELECTRONICS**



GSPN (Global Service Partner Network)

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North America	service.samsungportal.com
Latin America	latin.samsungportal.com
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7. Level 2 Repair

7-1. Disassembly and Assembly Instructions

7-1-1. Disassembly

<p>1</p> <p>Loosen 6 rear screws</p> 	<p>2</p> <p>Separates the Rear cover from the set using the jig.</p> 
<p>1) M1.4 X L4.0 SCREW Torque: 1.2 ~ 1.4kgf.cm</p>	<p>1) Be careful not to make a damage to the rear cover by jig.</p>
<p>3</p> <p>Detach LCD connector and Touch key FPCB connector from PBA</p> 	<p>4</p> <p>Loosen 2 screws on PBA</p> 
<p>1) Be careful with FPCB separation.</p>	<p>1) Be careful with PBA. ※ M1.4 X L3 SCREW Torque: 1.1 ~ 1.3kgf.cm</p>

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Detach PBA from LCD bracket.



1) Be careful when Motor, Receiver and Camera separate.

6

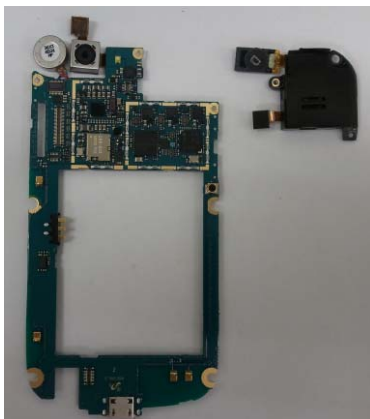
Detach connector and separate Sim socket FPCB and shield-cover from PBA.



1) Be careful not to make a damage when shield-cover separate from PBA.

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Loosen a screw on speaker module and separate the speaker module from PBA.



1) Be careful with connector and FPCB of speaker module.

※ M1.4 X L3

SCREW Torque: 1.1 ~ 1.3kgf.cm

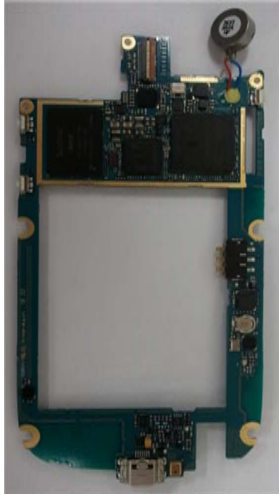

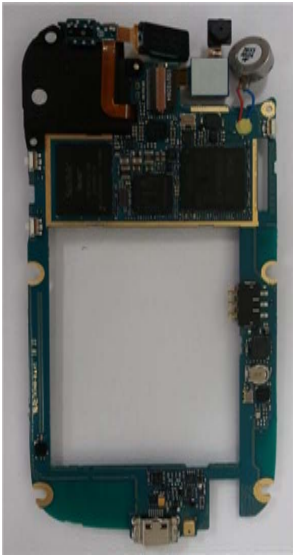
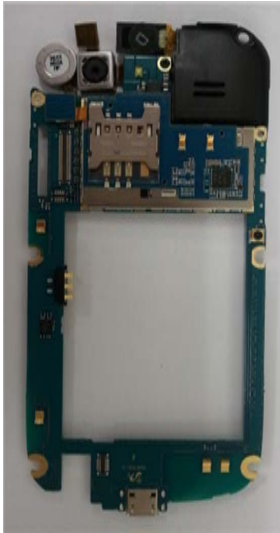
8

Finished.



1) Be careful of a damage on LCD connector.

7-1-2. Assembly

<p>1</p> <p>Soldering and bonding motor on PBA.</p> 	<p>2</p> <p>Attach speaker module on PBA and tighten a screw.</p> 
<p>1) Be careful not to make a damage to components by soldering iron.</p>	<p>1) Be careful with PBA. ※ M1.4 X L3 SCREW Torque: 1.1 ~ 1.3kgf.cm</p>
<p>3</p> <p>Attach camera module.</p> 	<p>4</p> <p>Put on Sim socket FPCB and shield-cover on PBA and attach connector.</p> 
<p>1) Be careful of components near soldering section.</p>	<p>1) Be careful with PBA.</p>

<p>5 Put PBA on Front Ass'y.</p> 	<p>6 Connect LCD and Touch key FPCB on PBA and tighten screws.</p> 
<p>1) Adjust the PBA to 2 POINT on Front Ass'y.</p>	<p>1) Push the connector with sound '??' to avoid incomplection of insert. SCREW Torque: 1.1 ~ 1.3kgf.cm</p>
<p>7 Attach Rear cover on set and tighten screws.</p> 	
<p>1) Be careful of appearance faulty ※ M1.4 X L4.0 SCREW Torque: 1.2 ~ 1.4kgf.cm</p>	

3. Operation Instruction and Installation

Main Function

- EDGE & GPRS Dual Standby
- MASTER : WCDMA Triple + GSM Quad Band
(WCDMA FDD 1, 4, 8 & GSM850+EGSM900+DCS1800+PCS1900)
- Bluetooth v2.1 + EDR
- 3.97" WVGA
- 5MP AF with Power LED

5. MAIN Electrical Parts List

Design LOG	SEC CODE	Discription
D501	0403-001688	DIODE-ZENER
ZD703	0403-001688	DIODE-ZENER
D701	0404-001646	DIODE-SCHOTTKY
U704	0406-001369	DIODE-TVS
ZD300	0406-001446	DIODE-TVS
ZD500	0406-001446	DIODE-TVS
ZD600	0406-001446	DIODE-TVS
ZD601	0406-001446	DIODE-TVS
ZD602	0406-001446	DIODE-TVS
ZD603	0406-001446	DIODE-TVS
ZD605	0406-001446	DIODE-TVS
ZD606	0406-001446	DIODE-TVS
ZD609	0406-001446	DIODE-TVS
ZD610	0406-001446	DIODE-TVS
ZD611	0406-001446	DIODE-TVS
ZD612	0406-001446	DIODE-TVS
ZD613	0406-001446	DIODE-TVS
ZD800	0406-001446	DIODE-TVS
ZD801	0406-001446	DIODE-TVS
ZD802	0406-001446	DIODE-TVS
D500	0407-001002	DIODE-ARRAY
Q700	0504-001138	TR-DIGITAL
LED700	0601-002779	LED
U300	0801-003139	IC-CMOS LOGIC
U304	0801-003227	IC-CMOS LOGIC
UCP400	0902-002582	IC-MICROPROCESSOR
U600	1001-001459	IC-ANALOG SWITCH
U703	1001-001580	IC-ANALOG MULTIPLEX
U804	1003-002047	IC-MOTOR DRIVER
U400	1003-002216	IC-LEVEL DRIVER
U302	1003-002352	IC-LEVEL DRIVER
U604	1003-002352	IC-LEVEL DRIVER
U303	1107-001937	IC-NAND FLASH
U107	1201-003091	IC-POWER AMP

Design LOG	SEC CODE	Discription
U108	1201-003092	IC-POWER AMP
PAM100	1201-003144	IC-RF AMP
U202	1201-003168	IC-RF AMP
U100	1201-003177	IC-RF AMP
U103	1201-003180	IC-POWER AMP
U606	1202-001036	IC-VOLTAGE COMP.
U700	1203-004339	IC-MULTI REG.
U301	1203-004524	IC-MULTI REG.
U104	1203-004819	IC-POSI.FIXED REG.
U601	1203-004819	IC-POSI.FIXED REG.
U603	1203-004819	IC-POSI.FIXED REG.
U608	1203-004819	IC-POSI.FIXED REG.
U701	1203-004819	IC-POSI.FIXED REG.
U705	1203-004845	IC-DC/DC CONVERTER
U803	1203-004925	IC-POSI.FIXED REG.
U502	1203-005772	IC-VOL. DETECTOR
U702	1203-006025	IC-DC/DC CONVERTER
U105	1203-006159	IC-DC/DC CONVERTER
U501	1203-006186	IC-POWER SUPERVISOR
U602	1205-003943	IC-CODEC
U101	1205-003949	IC-TRANSCIEVER
U201	1205-003966	IC-RECEIVER
UCP300	1205-003993	IC-MODEM
U800	1209-001872	IC-SENSOR
U801	1209-001922	IC-SENSOR
U805	1209-001997	IC-SENSOR
U109	1209-001998	IC-SENSOR
TH300	1404-001221	THERMISTOR-NTC
TH400	1404-001221	THERMISTOR-NTC
V700	1405-001177	VARISTOR
V701	1405-001177	VARISTOR
V702	1405-001177	VARISTOR
V703	1405-001177	VARISTOR
V704	1405-001177	VARISTOR
ZD604	1405-001296	VARISTOR

Design LOG	SEC CODE	Discription
ZD607	1405-001296	VARISTOR
ZD608	1405-001296	VARISTOR
R800	2007-000162	R-CHIP
R325	2007-000167	R-CHIP
R604	2007-000172	R-CHIP
R613	2007-000172	R-CHIP
R701	2007-000172	R-CHIP
R618	2007-000242	R-CHIP
R601	2007-001298	R-CHIP
R612	2007-001298	R-CHIP
R320	2007-003018	R-CHIP
R110	2007-003029	R-CHIP
R506	2007-007307	R-CHIP
R507	2007-007307	R-CHIP
R628	2007-007585	R-CHIP
R806	2007-007592	R-CHIP
R704	2007-007798	R-CHIP
R705	2007-007875	R-CHIP
R713	2007-007943	R-CHIP
R321	2007-008045	R-CHIP
R322	2007-008045	R-CHIP
R422	2007-008045	R-CHIP
R469	2007-008045	R-CHIP
R470	2007-008045	R-CHIP
R619	2007-008045	R-CHIP
R620	2007-008045	R-CHIP
R625	2007-008045	R-CHIP
R708	2007-008045	R-CHIP
R400	2007-008052	R-CHIP
R437	2007-008052	R-CHIP
R208	2007-008055	R-CHIP
R323	2007-008055	R-CHIP
R441	2007-008055	R-CHIP
R442	2007-008055	R-CHIP
R444	2007-008055	R-CHIP

Design LOG	SEC CODE	Discription
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R447	2007-008055	R-CHIP
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R706	2007-008055	R-CHIP
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R602	2007-008211	R-CHIP
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R312	2007-008312	R-CHIP
R100	2007-008419	R-CHIP
R401	2007-008419	R-CHIP
R402	2007-008419	R-CHIP
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R461	2007-008419	R-CHIP
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R111	2007-008486	R-CHIP
R508	2007-008502	R-CHIP
R202	2007-008516	R-CHIP
R203	2007-008516	R-CHIP
R204	2007-008516	R-CHIP
R205	2007-008516	R-CHIP

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R424	2007-008516	R-CHIP
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R714	2007-008516	R-CHIP
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R463	2007-008531	R-CHIP
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R316	2007-008588	R-CHIP
R711	2007-008774	R-CHIP
R712	2007-008774	R-CHIP
R108	2007-008806	R-CHIP
R207	2007-008806	R-CHIP
R500	2007-008809	R-CHIP
R624	2007-009084	R-CHIP
R627	2007-009084	R-CHIP

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R313	2007-009157	R-CHIP
R317	2007-009157	R-CHIP
R408	2007-009157	R-CHIP
R409	2007-009157	R-CHIP
R302	2007-009171	R-CHIP
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R309	2007-009171	R-CHIP
R102	2007-009212	R-CHIP
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C806	2203-000725	C-CER,CHIP
C632	2203-001153	C-CER,CHIP
C637	2203-001153	C-CER,CHIP

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C208	2203-002668	C-CER,CHIP
C134	2203-002709	C-CER,CHIP
C426	2203-005138	C-CER,CHIP
C117	2203-005234	C-CER,CHIP
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C121	2203-005731	C-CER,CHIP
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C520	2203-006399	C-CER,CHIP
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C335	2203-006423	C-CER,CHIP
C336	2203-006423	C-CER,CHIP
C401	2203-006423	C-CER,CHIP
C408	2203-006423	C-CER,CHIP
C413	2203-006423	C-CER,CHIP

Design LOG	SEC CODE	Discription
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C608	2203-006423	C-CER,CHIP
C609	2203-006423	C-CER,CHIP
C638	2203-006423	C-CER,CHIP
C720	2203-006423	C-CER,CHIP
C800	2203-006462	C-CER,CHIP
C320	2203-006474	C-CER,CHIP
C328	2203-006474	C-CER,CHIP
C131	2203-006562	C-CER,CHIP
C163	2203-006562	C-CER,CHIP
C216	2203-006562	C-CER,CHIP
C331	2203-006562	C-CER,CHIP
C404	2203-006562	C-CER,CHIP
C500	2203-006562	C-CER,CHIP
C502	2203-006562	C-CER,CHIP
C513	2203-006562	C-CER,CHIP
C514	2203-006562	C-CER,CHIP
C522	2203-006562	C-CER,CHIP
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C627	2203-006562	C-CER,CHIP
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C645	2203-006562	C-CER,CHIP
C805	2203-006562	C-CER,CHIP
C807	2203-006562	C-CER,CHIP

Design LOG	SEC CODE	Discription
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C150	2203-006611	C-CER,CHIP
C151	2203-006611	C-CER,CHIP
C201	2203-006642	C-CER,CHIP
C406	2203-006642	C-CER,CHIP
C416	2203-006642	C-CER,CHIP
C182	2203-006665	C-CER,CHIP
C420	2203-006668	C-CER,CHIP
C722	2203-006681	C-CER,CHIP
C723	2203-006681	C-CER,CHIP
C803	2203-006681	C-CER,CHIP
C100	2203-006707	C-CER,CHIP
C209	2203-006824	C-CER,CHIP
C217	2203-006824	C-CER,CHIP
C504	2203-006824	C-CER,CHIP
C164	2203-006839	C-CER,CHIP
C224	2203-006839	C-CER,CHIP
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C808	2203-006839	C-CER,CHIP
C537	2203-006841	C-CER,CHIP
C539	2203-006841	C-CER,CHIP
C712	2203-006841	C-CER,CHIP
C203	2203-006872	C-CER,CHIP
C204	2203-006872	C-CER,CHIP
C207	2203-006872	C-CER,CHIP
C215	2203-006872	C-CER,CHIP

Design LOG	SEC CODE	Discription
C220	2203-006872	C-CER,CHIP
C624	2203-006872	C-CER,CHIP
C628	2203-006872	C-CER,CHIP
C629	2203-006872	C-CER,CHIP
C132	2203-006979	C-CER,CHIP
C133	2203-006979	C-CER,CHIP
C810	2203-006979	C-CER,CHIP
C136	2203-007133	C-CER,CHIP
C106	2203-007210	C-CER,CHIP
C301	2203-007210	C-CER,CHIP
C304	2203-007210	C-CER,CHIP
C308	2203-007210	C-CER,CHIP
C323	2203-007210	C-CER,CHIP
C334	2203-007210	C-CER,CHIP
C711	2203-007210	C-CER,CHIP
C154	2203-007270	C-CER,CHIP
C165	2203-007270	C-CER,CHIP
C168	2203-007270	C-CER,CHIP
C179	2203-007270	C-CER,CHIP
C200	2203-007270	C-CER,CHIP
C310	2203-007270	C-CER,CHIP
C312	2203-007270	C-CER,CHIP
C325	2203-007270	C-CER,CHIP
C326	2203-007270	C-CER,CHIP
C503	2203-007270	C-CER,CHIP
C315	2203-007271	C-CER,CHIP
C317	2203-007271	C-CER,CHIP
C337	2203-007271	C-CER,CHIP
C403	2203-007271	C-CER,CHIP
C414	2203-007271	C-CER,CHIP
C418	2203-007271	C-CER,CHIP
C430	2203-007271	C-CER,CHIP
C540	2203-007271	C-CER,CHIP
C700	2203-007271	C-CER,CHIP
C701	2203-007271	C-CER,CHIP

Design LOG	SEC CODE	Discription
C702	2203-007271	C-CER,CHIP
C717	2203-007271	C-CER,CHIP
C721	2203-007271	C-CER,CHIP
C802	2203-007271	C-CER,CHIP
C804	2203-007271	C-CER,CHIP
C409	2203-007317	C-CER,CHIP
C410	2203-007317	C-CER,CHIP
C417	2203-007317	C-CER,CHIP
C607	2203-007317	C-CER,CHIP
C626	2203-007317	C-CER,CHIP
C630	2203-007317	C-CER,CHIP
C639	2203-007317	C-CER,CHIP
C715	2203-007317	C-CER,CHIP
C716	2203-007317	C-CER,CHIP
C811	2203-007391	C-CER,CHIP
C601	2203-007393	C-CER,CHIP
C603	2203-007393	C-CER,CHIP
C703	2203-007393	C-CER,CHIP
C704	2203-007393	C-CER,CHIP
C705	2203-007393	C-CER,CHIP
C706	2203-007393	C-CER,CHIP
C707	2203-007393	C-CER,CHIP
C708	2203-007393	C-CER,CHIP
C801	2203-007393	C-CER,CHIP
C809	2203-007393	C-CER,CHIP
C300	2203-007449	C-CER,CHIP
C302	2203-007449	C-CER,CHIP
C306	2203-007449	C-CER,CHIP
C307	2203-007449	C-CER,CHIP
C318	2203-007449	C-CER,CHIP
C321	2203-007449	C-CER,CHIP
C322	2203-007449	C-CER,CHIP
C324	2203-007449	C-CER,CHIP
C332	2203-007449	C-CER,CHIP
C333	2203-007449	C-CER,CHIP

Design LOG	SEC CODE	Discription
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C402	2203-007449	C-CER,CHIP
C405	2203-007449	C-CER,CHIP
C407	2203-007449	C-CER,CHIP
C411	2203-007449	C-CER,CHIP
C412	2203-007449	C-CER,CHIP
C602	2203-007449	C-CER,CHIP
C622	2203-007449	C-CER,CHIP
C646	2203-007449	C-CER,CHIP
C713	2203-007634	C-CER,CHIP
C718	2203-007693	C-CER,CHIP
TA500	2404-001339	C-TA,CHIP
TA501	2404-001339	C-TA,CHIP
TA502	2404-001339	C-TA,CHIP
TA503	2404-001339	C-TA,CHIP
TA504	2404-001339	C-TA,CHIP
TA505	2404-001506	C-TA,CHIP
TA601	2404-001506	C-TA,CHIP
TA600	2404-001561	C-TA,CHIP
L610	2703-001206	INDUCTOR-SMD
L206	2703-001734	INDUCTOR-SMD
L101	2703-002176	INDUCTOR-SMD
L802	2703-002309	INDUCTOR-SMD
L803	2703-002309	INDUCTOR-SMD
L102	2703-002842	INDUCTOR-SMD
L112	2703-002842	INDUCTOR-SMD
L800	2703-002842	INDUCTOR-SMD
L801	2703-002842	INDUCTOR-SMD
L122	2703-002858	INDUCTOR-SMD
L123	2703-002858	INDUCTOR-SMD
L702	2703-002862	INDUCTOR-SMD
L115	2703-002901	INDUCTOR-SMD
L107	2703-002903	INDUCTOR-SMD
L110	2703-002903	INDUCTOR-SMD
L118	2703-002907	INDUCTOR-SMD

Design LOG	SEC CODE	Discription
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L106	2703-002953	INDUCTOR-SMD
L105	2703-002999	INDUCTOR-SMD
L119	2703-002999	INDUCTOR-SMD
L201	2703-003470	INDUCTOR-SMD
L701	2703-003502	INDUCTOR-SMD
L503	2703-003686	INDUCTOR-SMD
L111	2703-003802	INDUCTOR-SMD
L202	2703-003869	INDUCTOR-SMD
L302	2703-003869	INDUCTOR-SMD
L303	2703-003869	INDUCTOR-SMD
L500	2703-003892	INDUCTOR-SMD
L501	2703-003892	INDUCTOR-SMD
L502	2703-003892	INDUCTOR-SMD
L100	2703-003908	INDUCTOR-SMD
L117	2703-003908	INDUCTOR-SMD
L120	2703-003908	INDUCTOR-SMD
L113	2703-003914	INDUCTOR-SMD
L109	2703-003915	INDUCTOR-SMD
L114	2703-003916	INDUCTOR-SMD
L108	2703-003970	INDUCTOR-SMD
L103	2703-004000	INDUCTOR-SMD
L116	2703-004001	INDUCTOR-SMD
L124	2703-004013	INDUCTOR-SMD
OSC300	2801-004373	CRYSTAL-SMD
OSC400	2801-004458	CRYSTAL-SMD
OSC500	2801-004902	CRYSTAL-SMD
OSC201	2804-001884	OSCILLATOR-CLOCK
OSC200	2809-001348	OSCILLATOR-TCXO
OSC100	2809-001358	OSCILLATOR-TCXO
F700	2901-001413	FILTER-EMI SMD
F701	2901-001413	FILTER-EMI SMD
F702	2901-001413	FILTER-EMI SMD
F703	2901-001413	FILTER-EMI SMD
F704	2901-001413	FILTER-EMI SMD

Design LOG	SEC CODE	Discription
F705	2901-001413	FILTER-EMI SMD
F706	2901-001604	FILTER-EMI SMD
F707	2901-001604	FILTER-EMI SMD
F104	2904-001778	FILTER-SAW
F105	2904-001847	FILTER-SAW
F108	2904-001850	FILTER-SAW
F102	2904-001953	FILTER-SAW
F100	2904-001966	FILTER-SAW
F101	2904-001973	FILTER-SAW
F106	2910-000081	DUPLEXER-SAW
F103	2910-000101	DUPLEXER-SAW
F107	2910-000107	DUPLEXER-SAW
MIC600	3003-001136	MIC MEMS
L300	3301-001120	BEAD-SMD
L301	3301-001120	BEAD-SMD
L703	3301-001438	BEAD-SMD
L200	3301-001659	BEAD-SMD
L700	3301-001729	BEAD-SMD
L600	3301-001789	BEAD-SMD
L601	3301-001789	BEAD-SMD
L204	3301-001885	BEAD-SMD
L602	3301-001885	BEAD-SMD
L603	3301-001885	BEAD-SMD
L604	3301-001885	BEAD-SMD
L605	3301-001885	BEAD-SMD
L606	3301-001885	BEAD-SMD
L607	3301-001885	BEAD-SMD
L608	3301-001885	BEAD-SMD
L609	3301-001885	BEAD-SMD
TAC800	3404-001303	SWITCH-TACT
TAC801	3404-001303	SWITCH-TACT
TAC802	3404-001303	SWITCH-TACT
RFS100	3705-001731	CONNECTOR-COAXIAL
HDC700	3708-002162	CONNECTOR-FPC/FFC/PIC
HDC300	3711-005962	HEADER-BOARD TO BOARD

Design LOG	SEC CODE	Discription
BTC500	3711-006299	HEADER-BATTERY
HDC701	3711-006483	HEADER-BOARD TO BOARD
HDC600	3711-006615	HEADER-BOARD TO BOARD
HDC601	3711-006923	HEADER-BOARD TO BOARD
HDC400	3711-007173	HEADER-BOARD TO BOARD
ANT100	3712-001348	CONNECTOR-TERMINAL
ANT101	3712-001348	CONNECTOR-TERMINAL
ANT200	3712-001348	CONNECTOR-TERMINAL
ANT201	3712-001348	CONNECTOR-TERMINAL
IFC700	3722-002867	JACK-MINI USB
BAT500	4302-001180	BATTERY-LI(2ND)
U200	4709-001844	W-LAN MODULE
SC100	GH70-04443A	ICT SHIELD-CAN CLIP
SC101	GH70-04443A	ICT SHIELD-CAN CLIP
SC102	GH70-04443A	ICT SHIELD-CAN CLIP
SC103	GH70-04443A	ICT SHIELD-CAN CLIP
SC104	GH70-04443A	ICT SHIELD-CAN CLIP
SC105	GH70-04443A	ICT SHIELD-CAN CLIP
SC106	GH70-04443A	
SC107	GH70-04443A	
SC800	GH70-04443A	
SC801	GH70-04443A	
SC802	GH70-04443A	
SC803	GH70-04443A	

Please consult the GSPN website (Samsung Portal) for the most recent version of the product's part list.

1. Mesures de précaution

1-1. Mesures de précaution pour la réparation

- Procédez à la réparation et aux réglages fins dans une cabine isolée.
Soyez prudent lors du réglage ou du test, car ce téléphone mobile est sensible aux interférences (bruit RF).

- Soyez vigilant lors de l'utilisation d'un objet ou d'un outil magnétique, car les pièces sont sensibles aux forces magnétiques.

- Démontez le téléphone à l'aide d'un tournevis standard pour ne pas abîmer les vis.

- Prenez la mesure du niveau à l'aide d'un fil torsadé épais.
La faible résistance du fil torsadé épais permet de limiter les erreurs de mesure.

- Pour éviter tout danger de court-circuit (surtension, pièces qui s'enflamment, etc.) lors de la réparation de la carte, procédez à la réparation du téléphone après avoir utilisé le kit de test séparément.

- Soyez prudent lors de la soudure, car la carte est très petite et sensible à la chaleur.

- Veillez à effectuer le réglage de marche/arrêt lorsque vous utilisez le cordon d'alimentation CA, car il est dangereux de réparer le chargeur de batterie lors du réglage du connecteur et de la carte de marche/arrêt (lorsque le chargeur est démonté).

- Veillez à utiliser uniquement les pièces de rechange prévues dans le système SEC.
Dans le cas contraire, le technicien sollicité ne sera pas tenu pour responsable.

1-2. Mesures de précaution contre les décharges électrostatiques

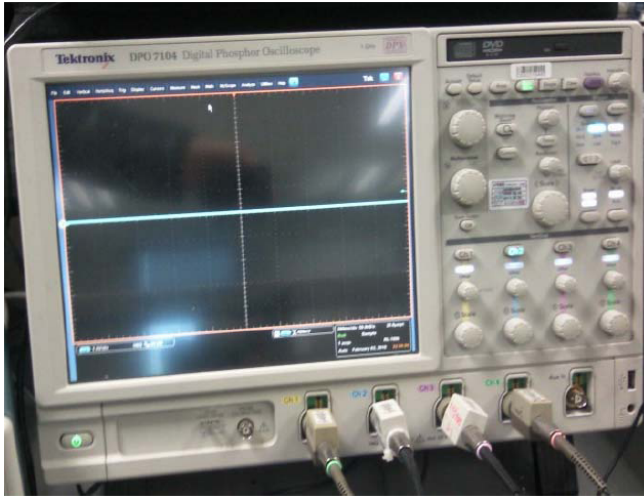
Les semi-conducteurs sont sensibles à l'électricité statique. Il s'agit notamment des circuits imprimés, de la puce BGA, etc. Veuillez lire les précautions ci-dessous.

Vous pouvez éviter les dégâts occasionnés par l'électricité statique.

- Veillez à vous décharger de l'électricité statique présente sur vous avant de toucher un semi-conducteur ou des pièces comportant un semi-conducteur. Pour cela, touchez un élément mis à la terre ou portez un bracelet antistatique.
- Pour connecter ou déconnecter un appareil sensible aux décharges électrostatiques, utilisez du métal de soudure mis à la terre.
- Utilisez un outil de suppression de soudure pour arrêter l'électricité statique, sans quoi les appareils qui y sont sensibles risquent d'être endommagés.
- Veillez à ne pas déballer l'appareil tant que vous n'avez pas pris de mesures de précaution contre les décharges électrostatiques. La plupart des appareils sensibles aux décharges électrostatiques sont emballés dans des boîtes en aluminium (conducteur) pour les protéger de l'électricité statique.
- Veillez à maintenir le contact électrique entre l'appareil sensible aux décharges électrostatiques et l'environnement de réglage jusqu'à ce que l'appareil soit entièrement connecté sur place ou à une carte de circuit imprimé.

8b-3. Recherche des pannes

Matériel



↑ Oscilloscope



↑ Multimètre numérique

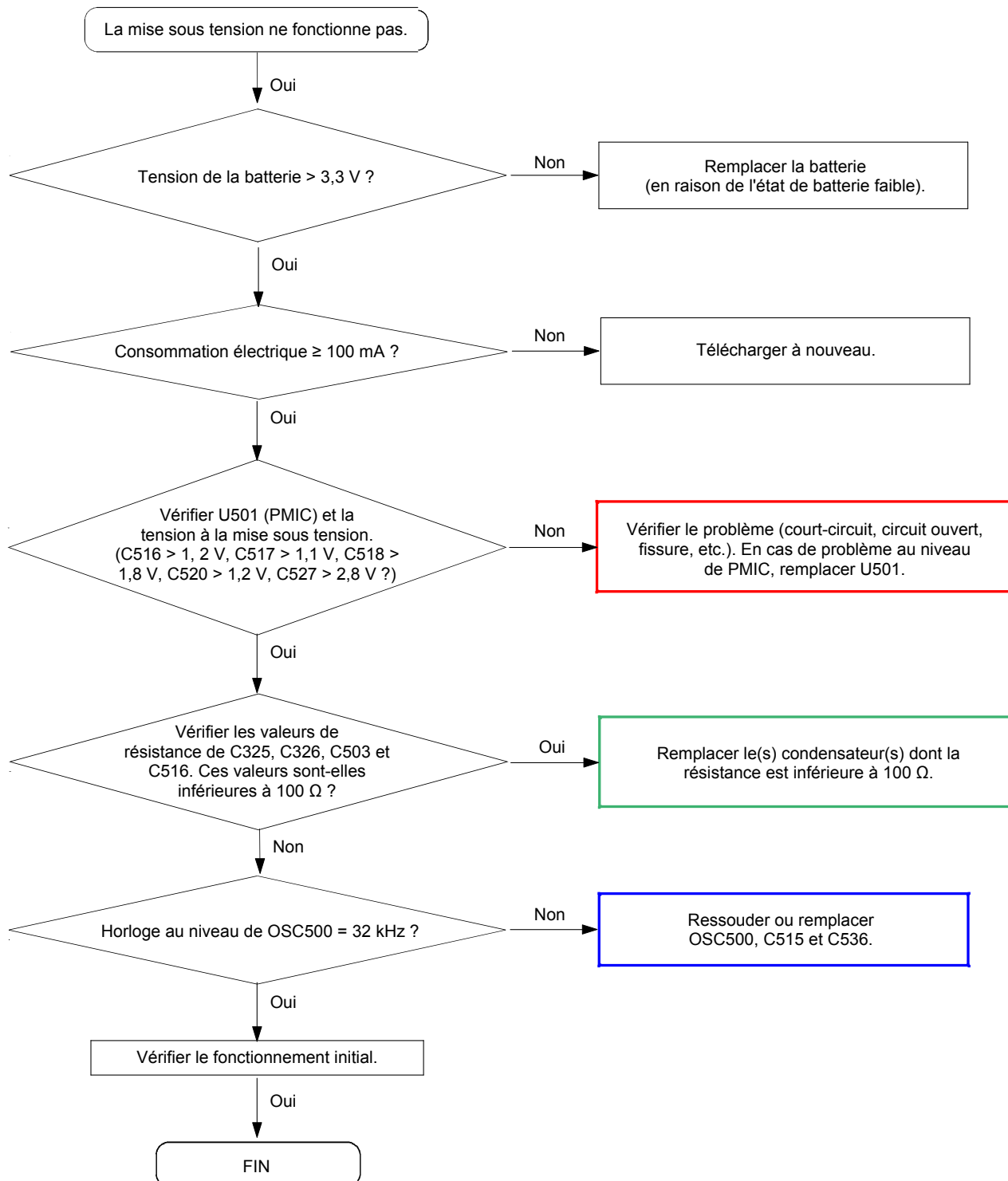


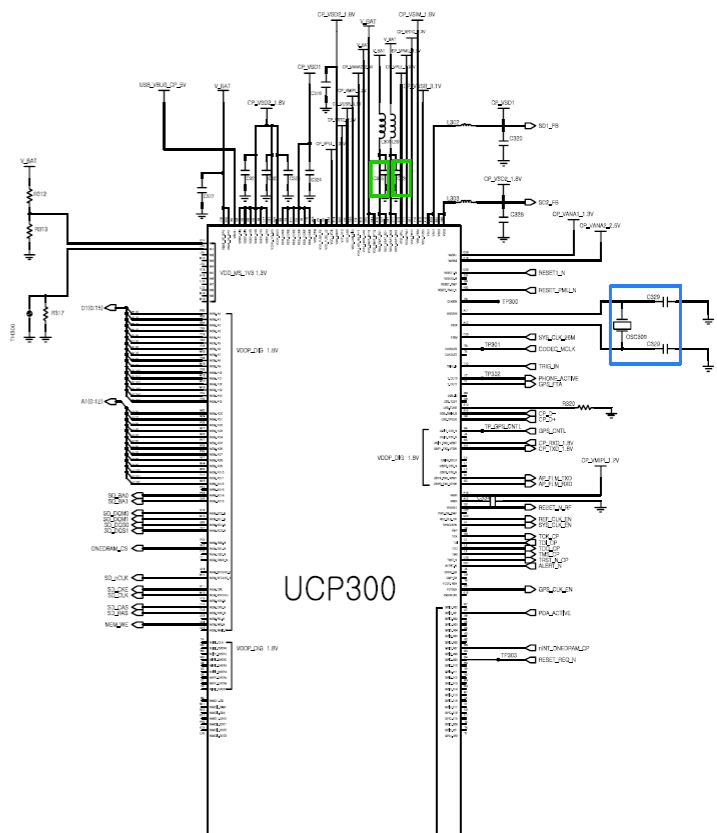
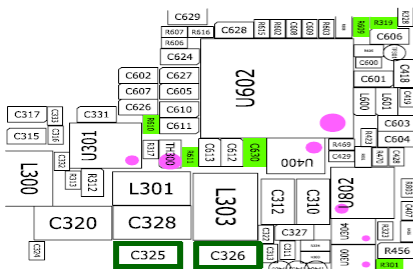
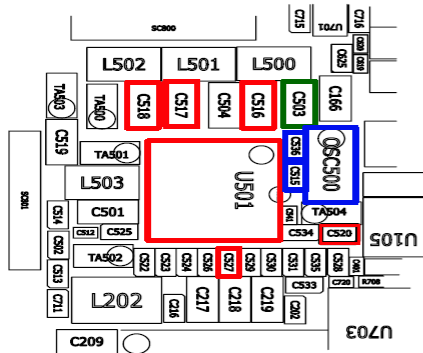
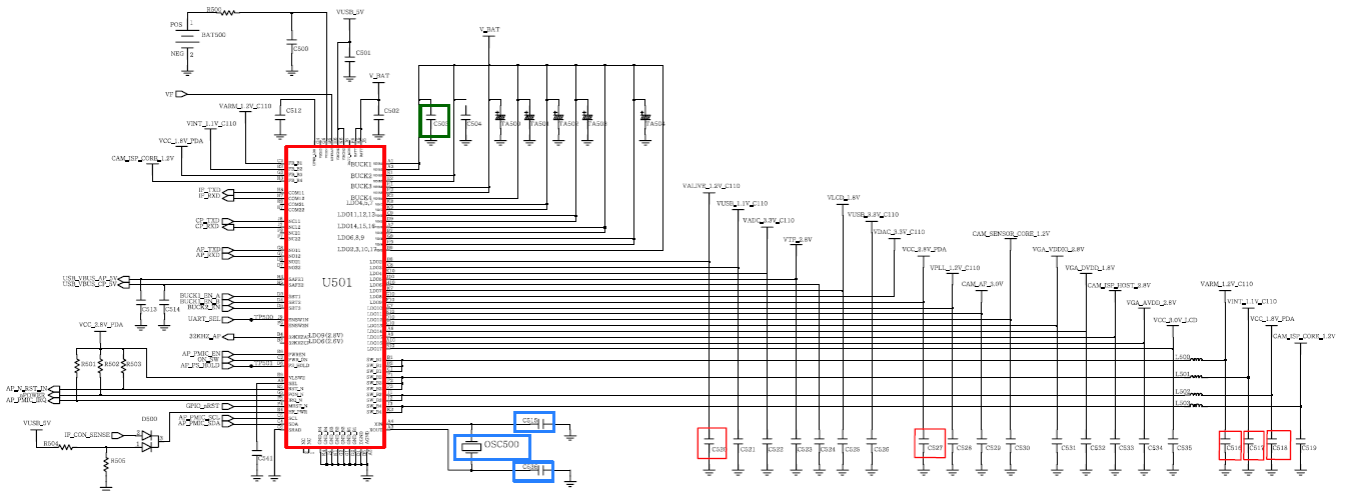
↑ Alimentation électrique



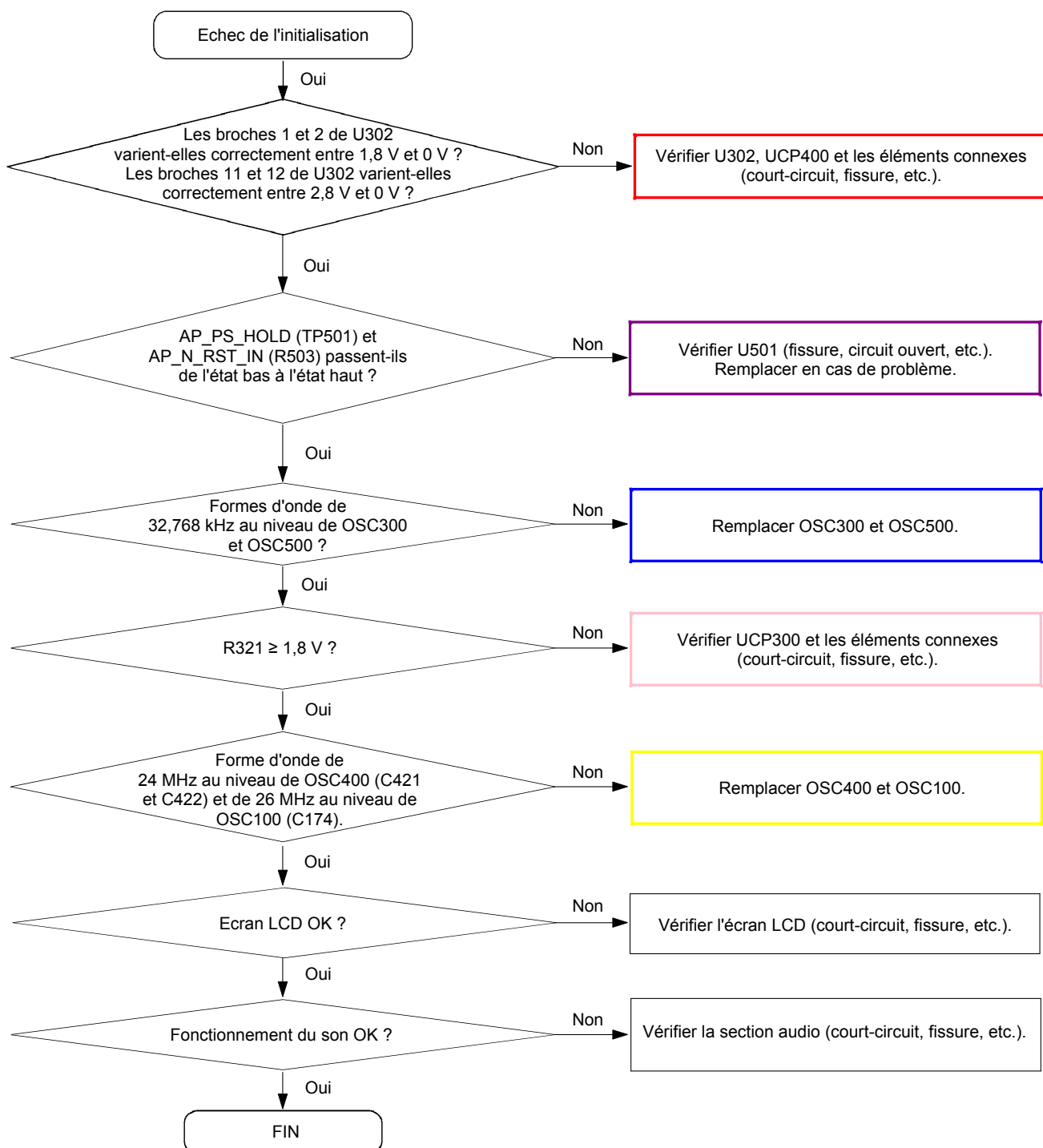
↑ Tournevis cruciforme, pince

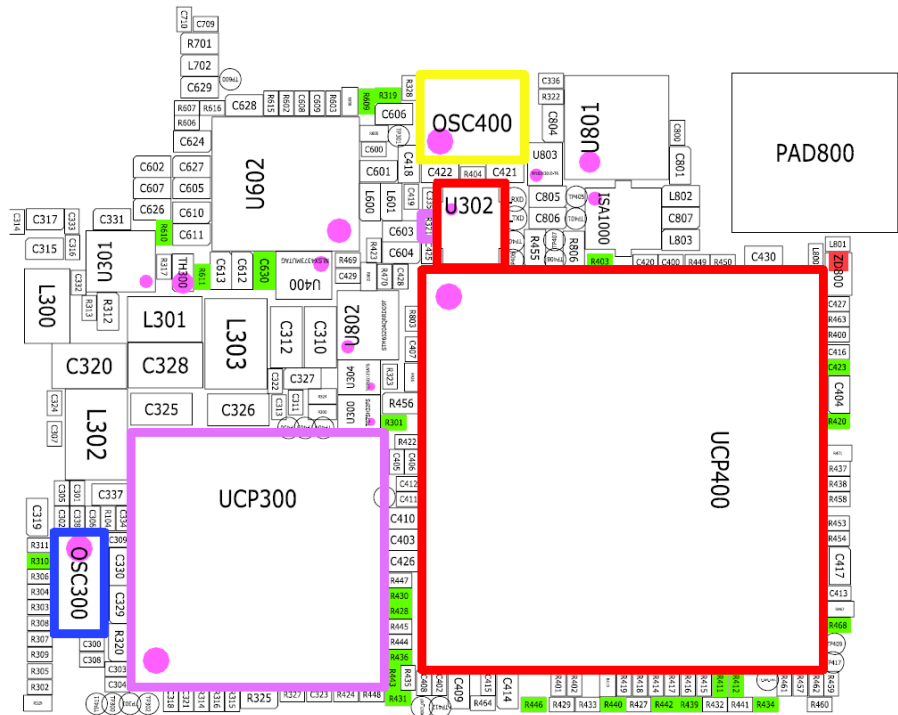
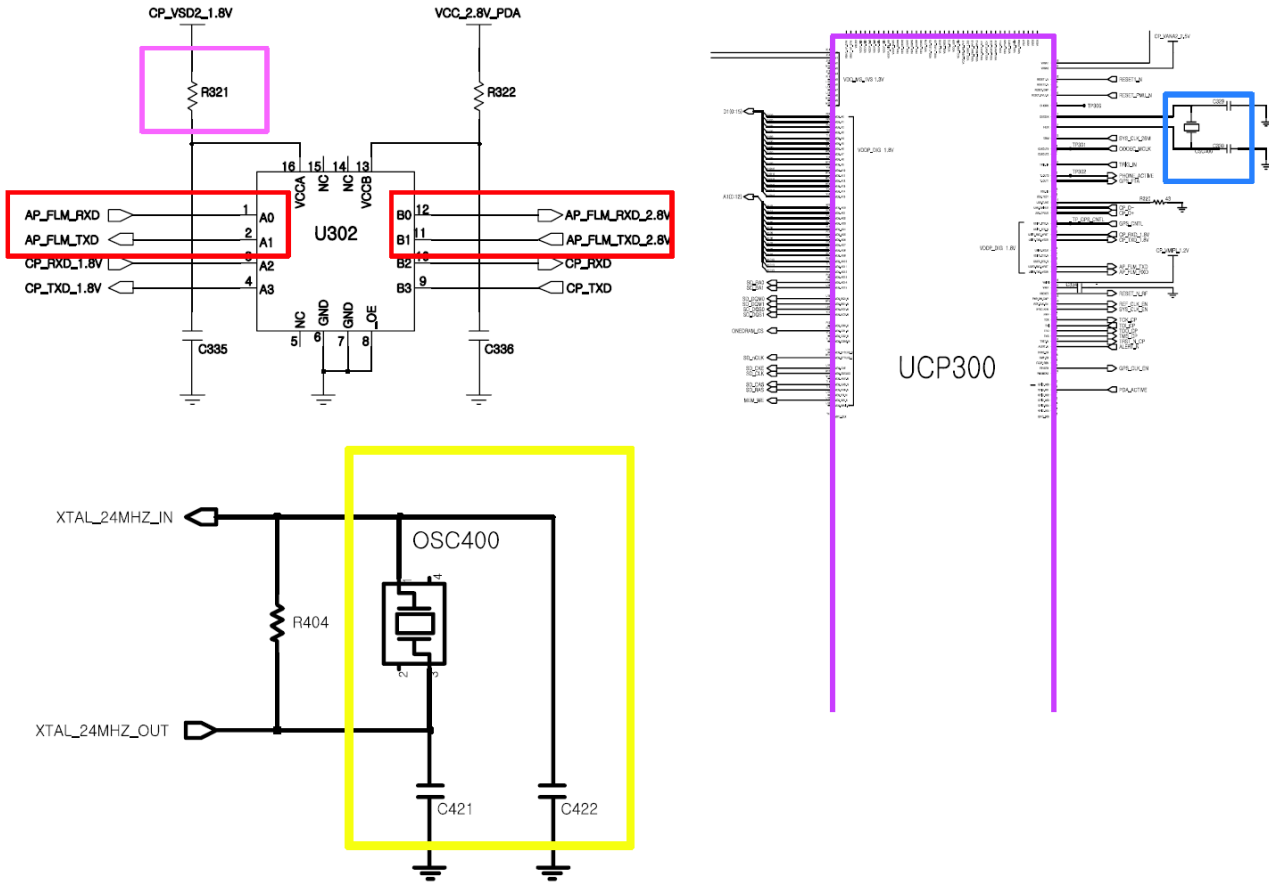
8b-3-1. Mise sous tension

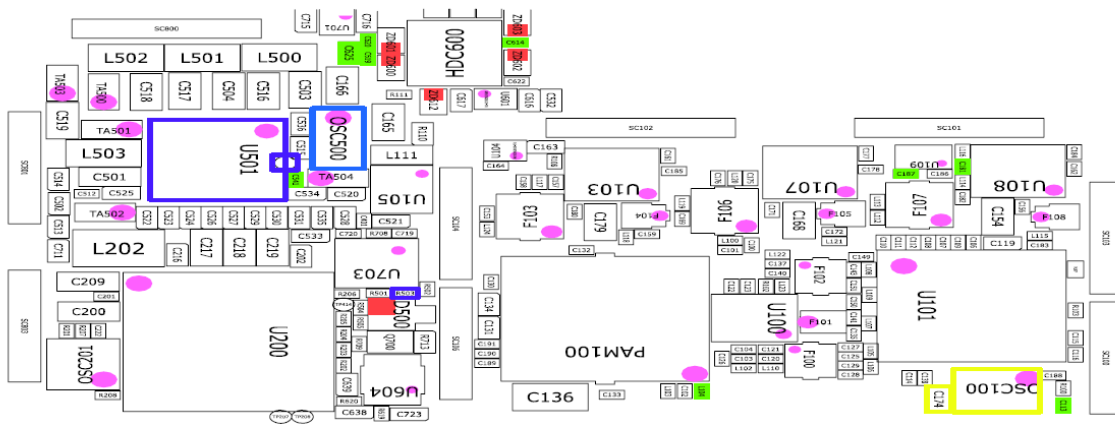
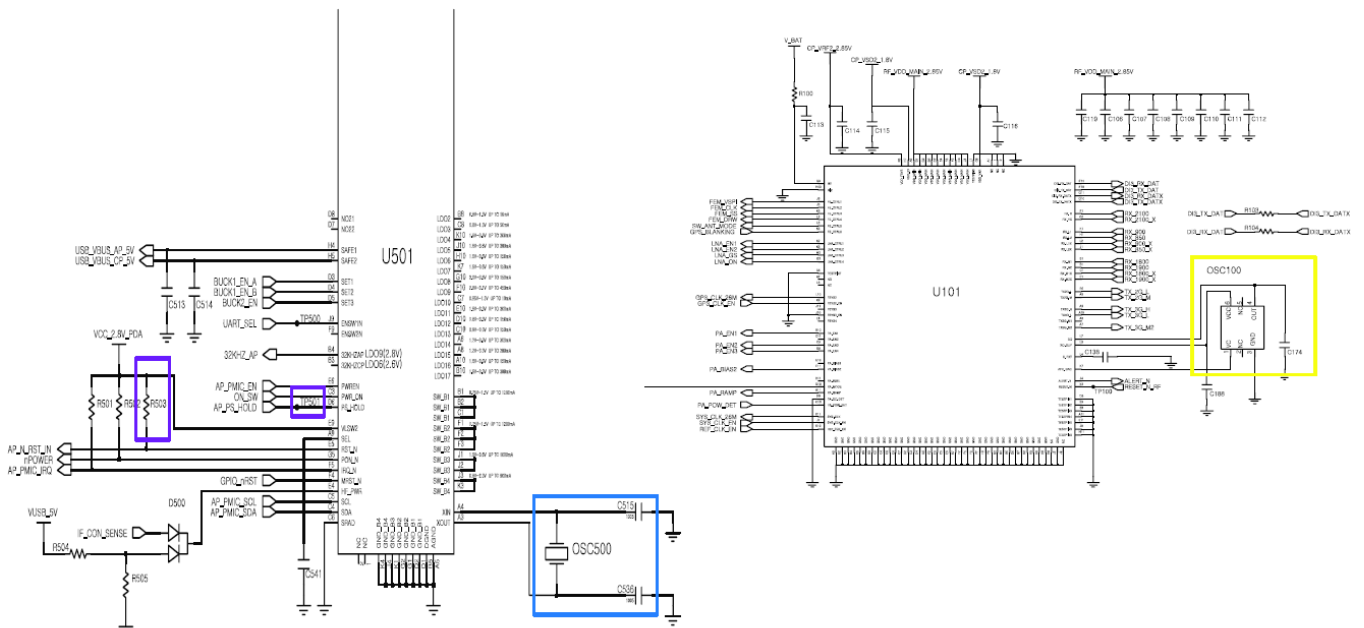




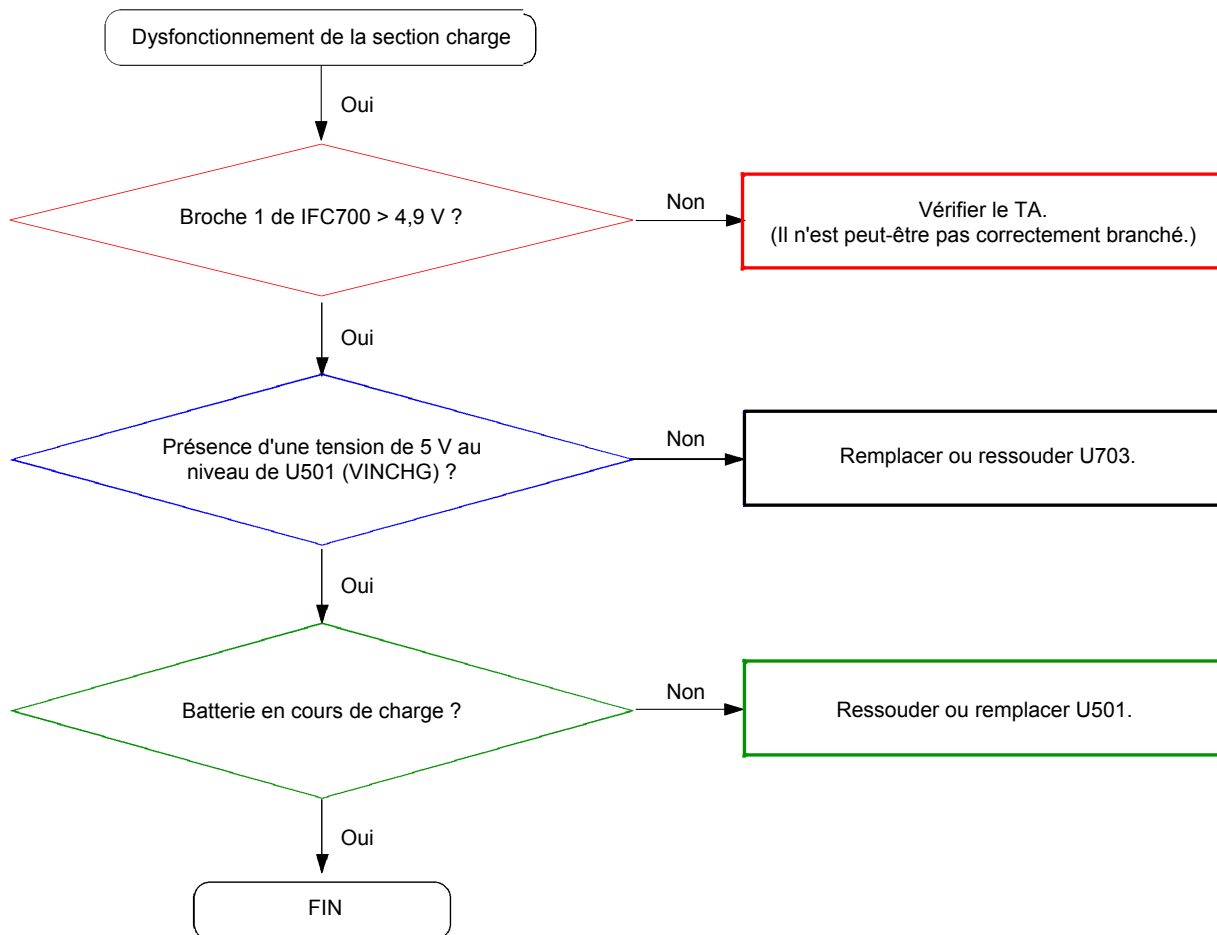
8b-3-2. Initialisation

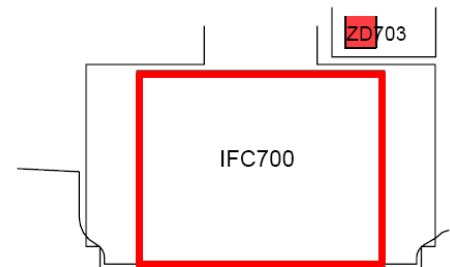
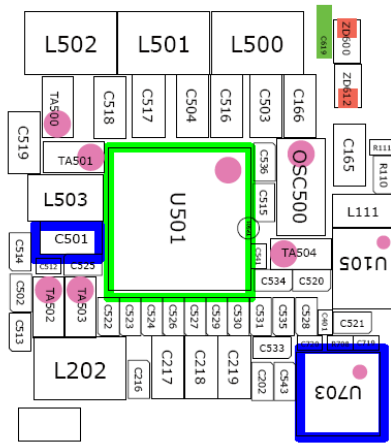
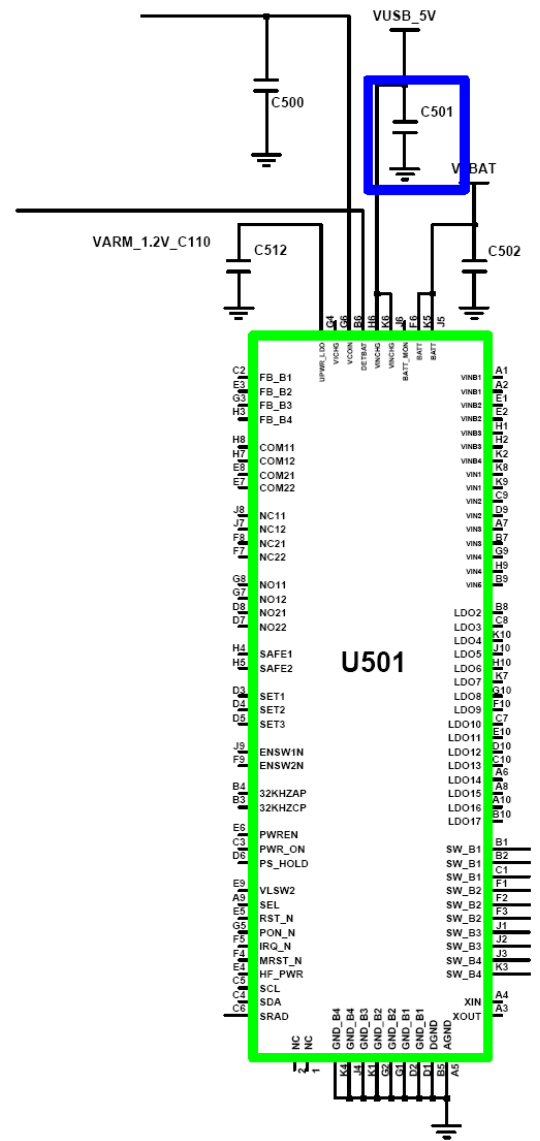
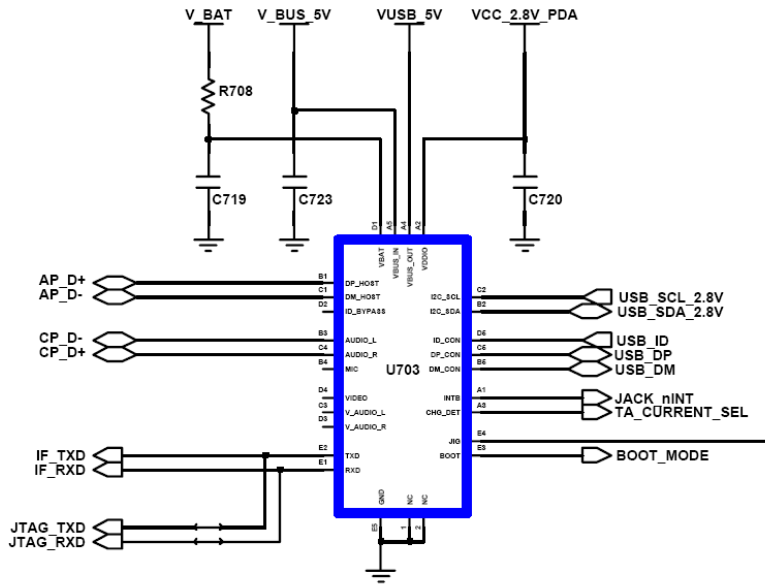




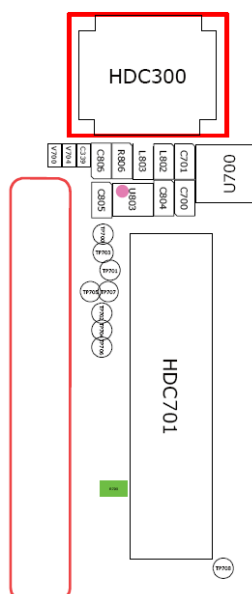
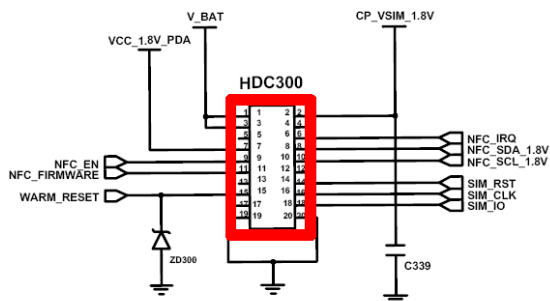
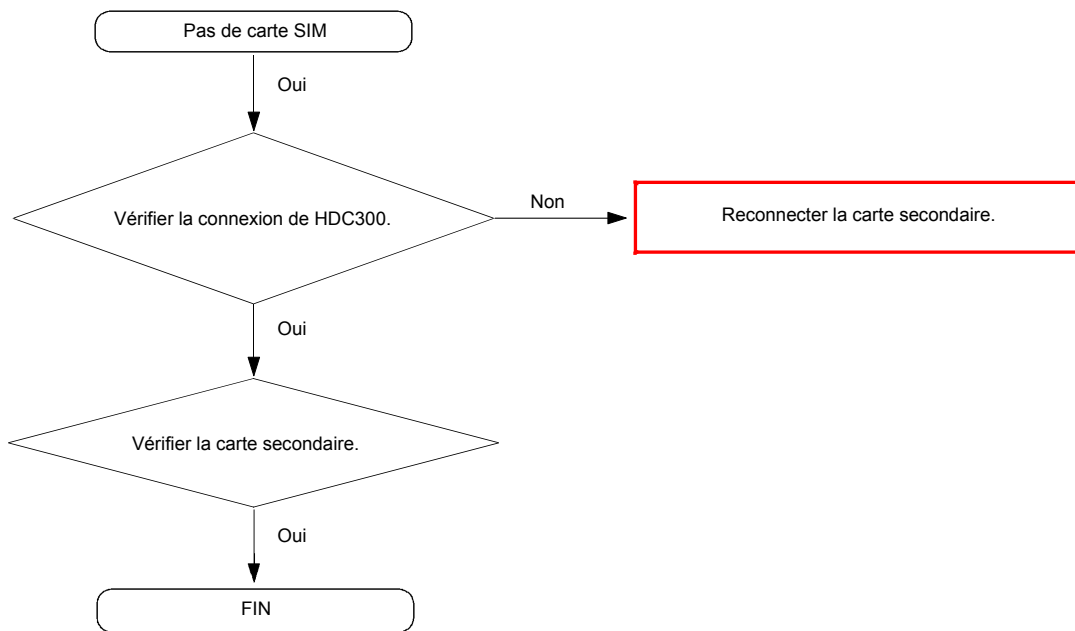


8b-3-3. Section charge

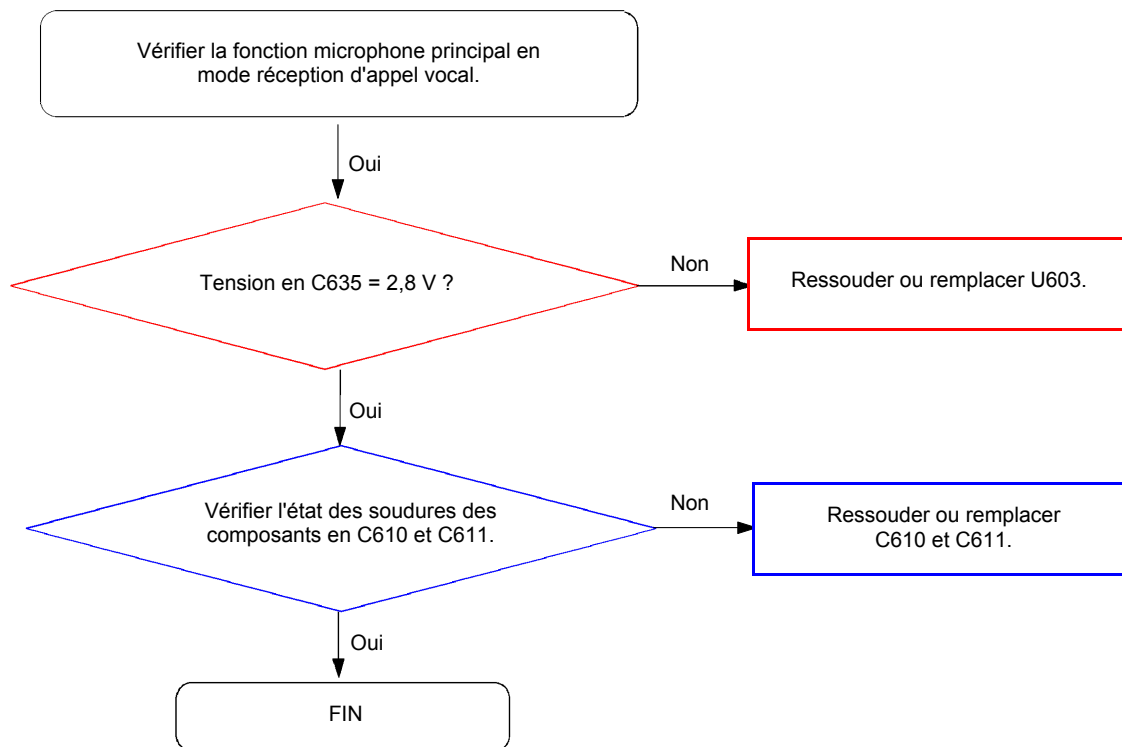


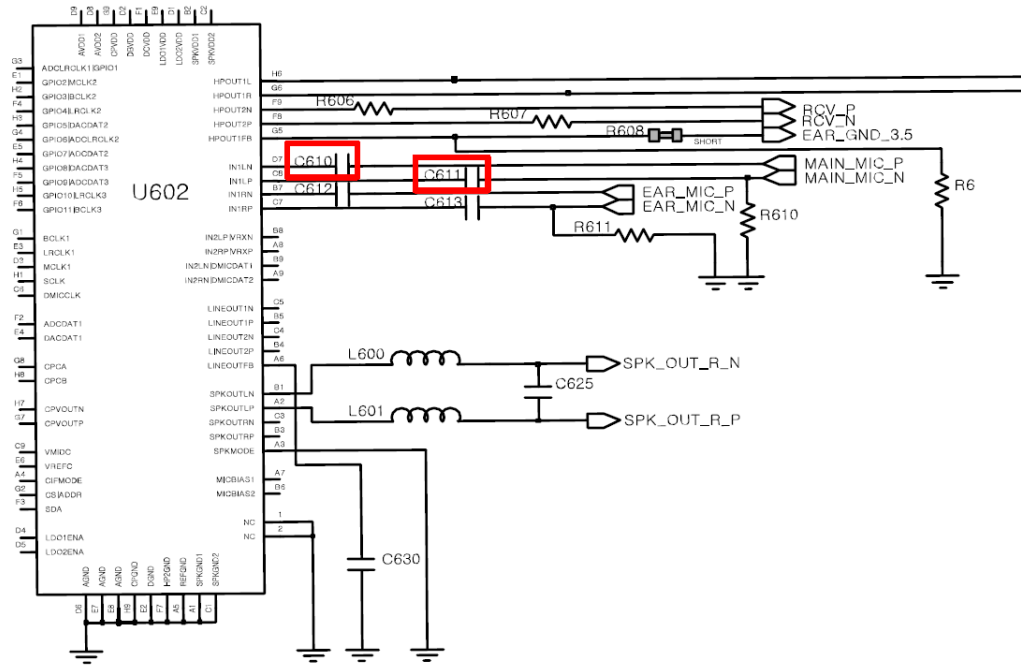


8b-3-4. Section SIM

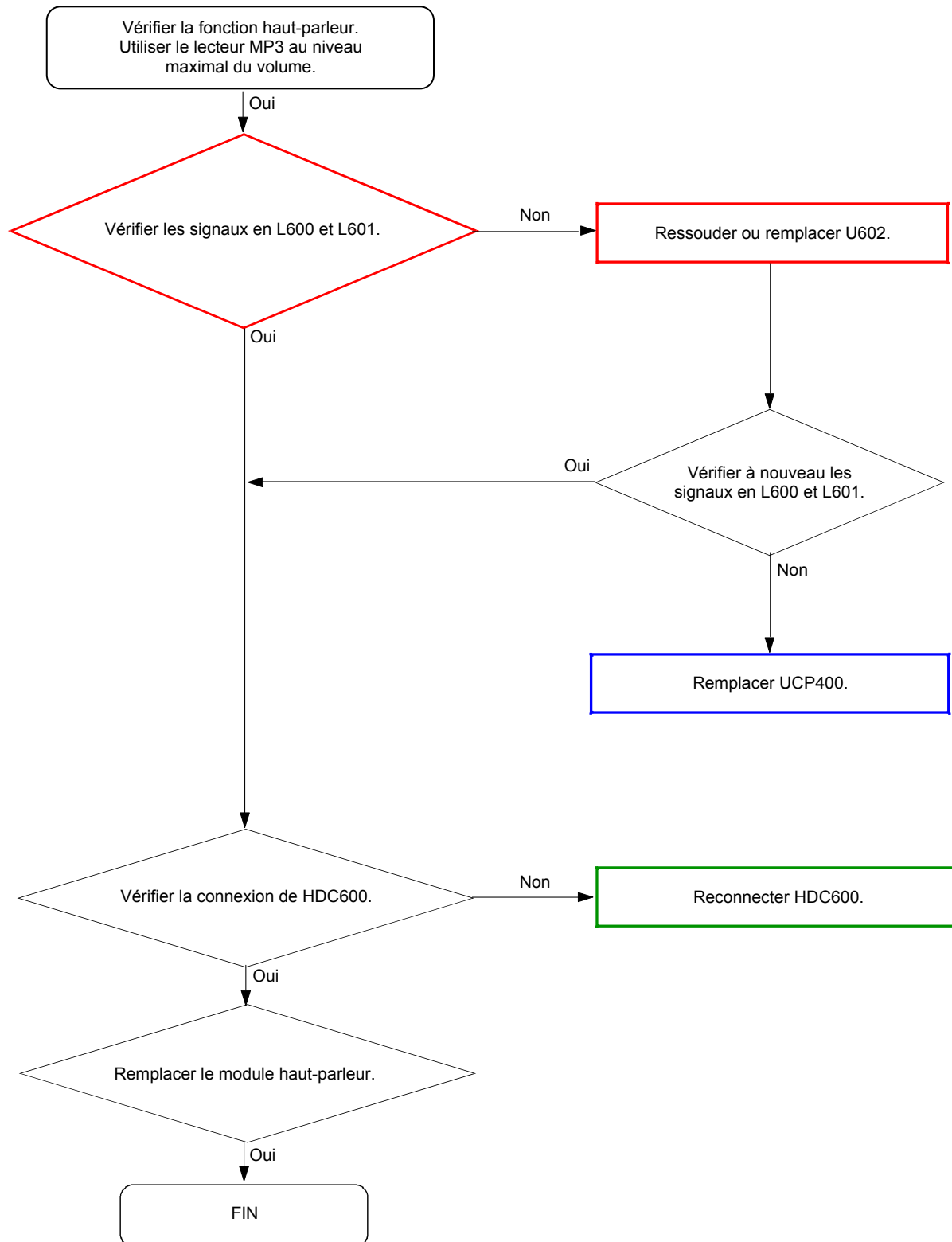


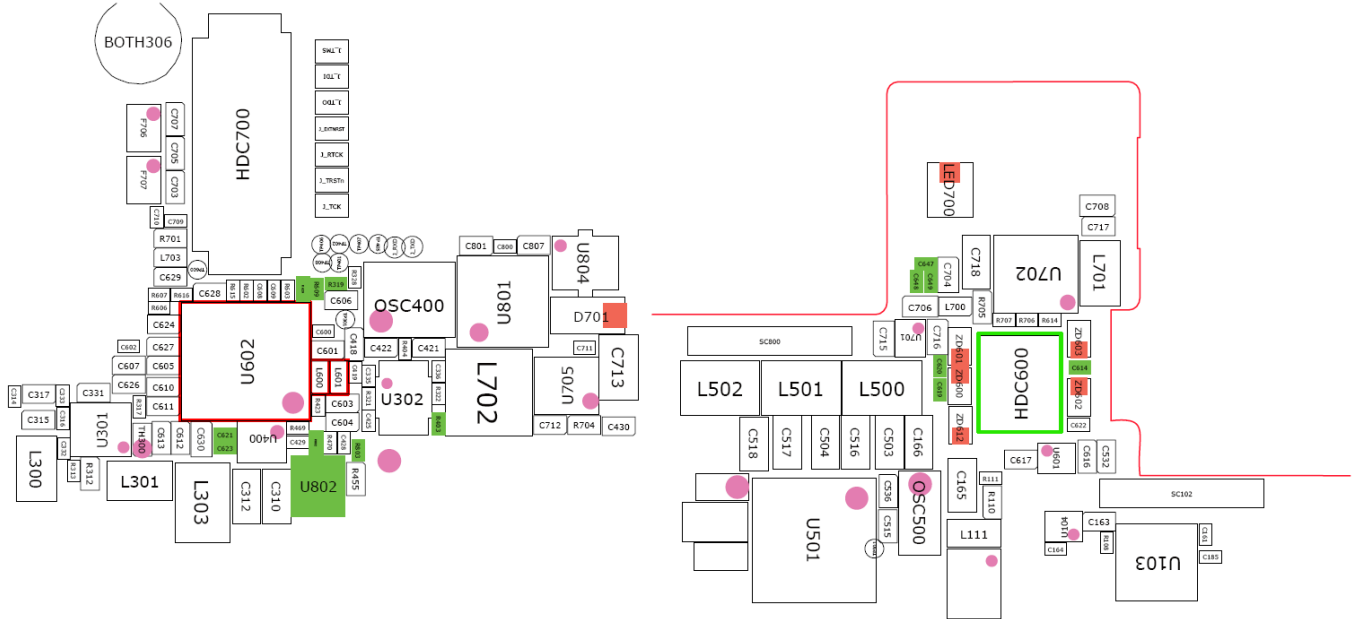
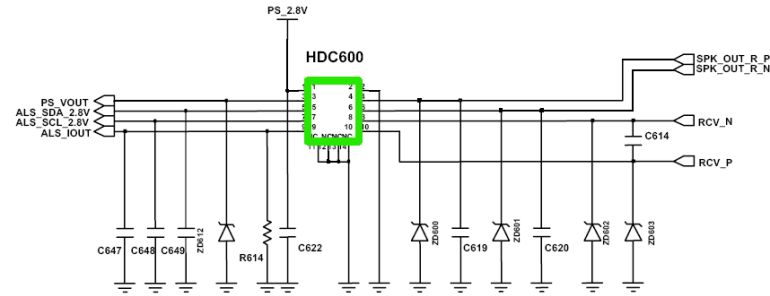
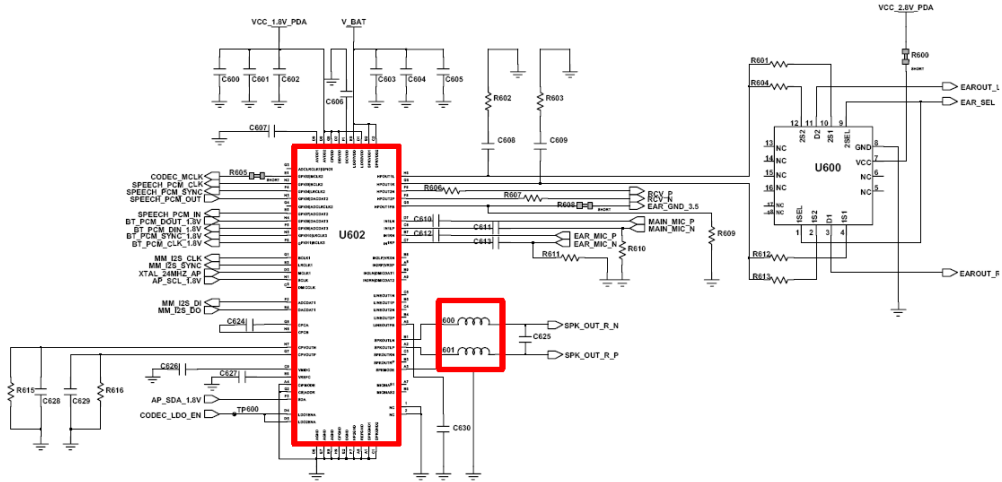
8b-3-5. Section microphone



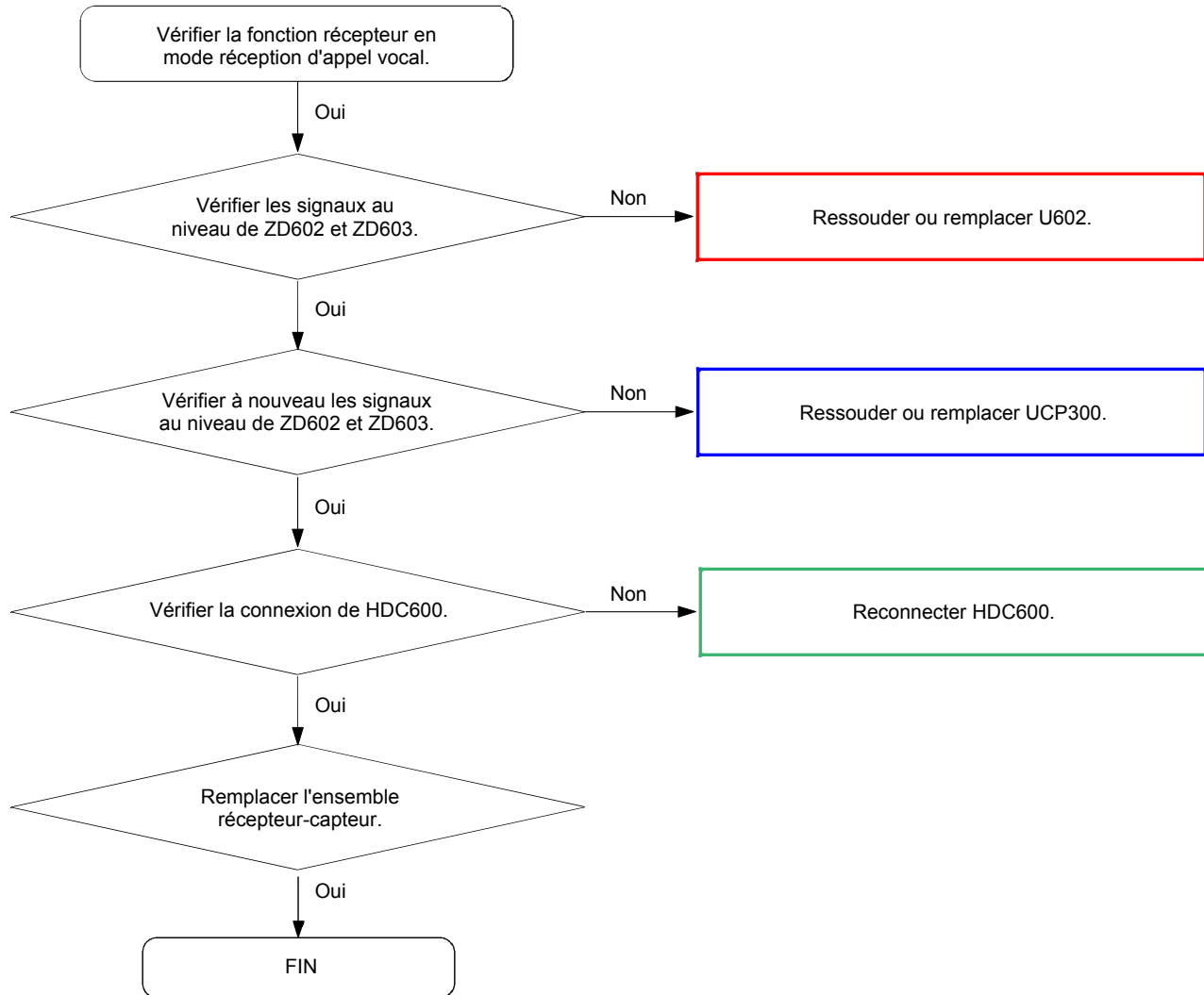


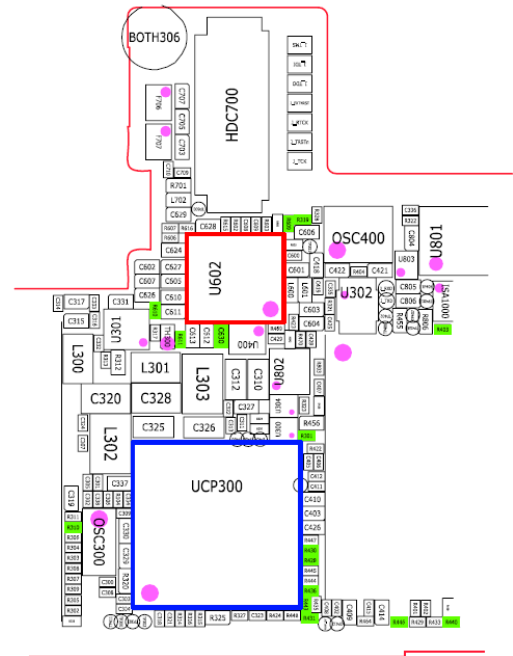
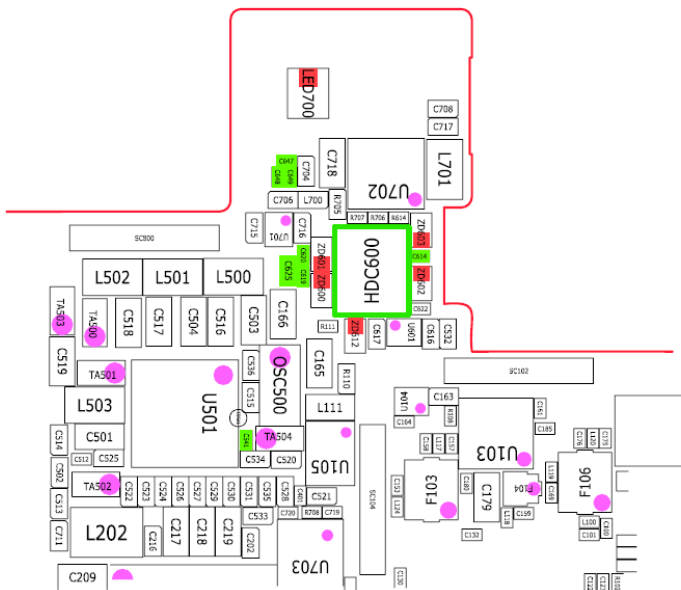
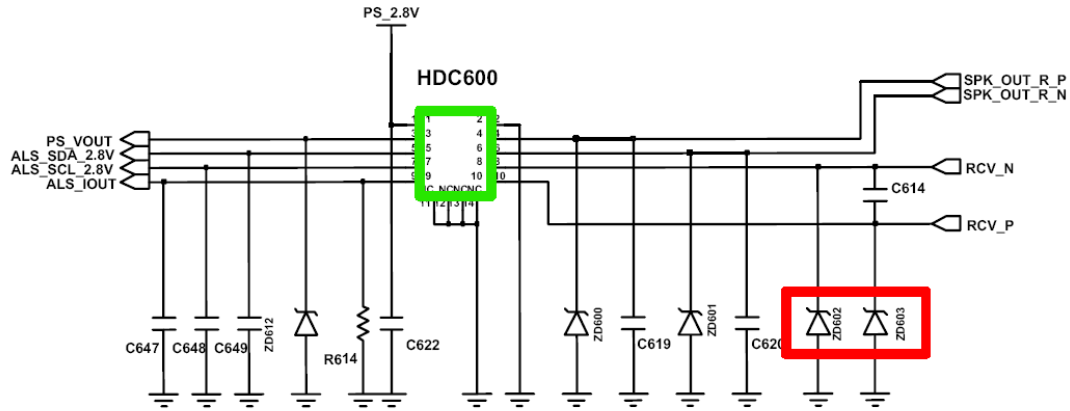
8b-3-6. Section haut-parleur



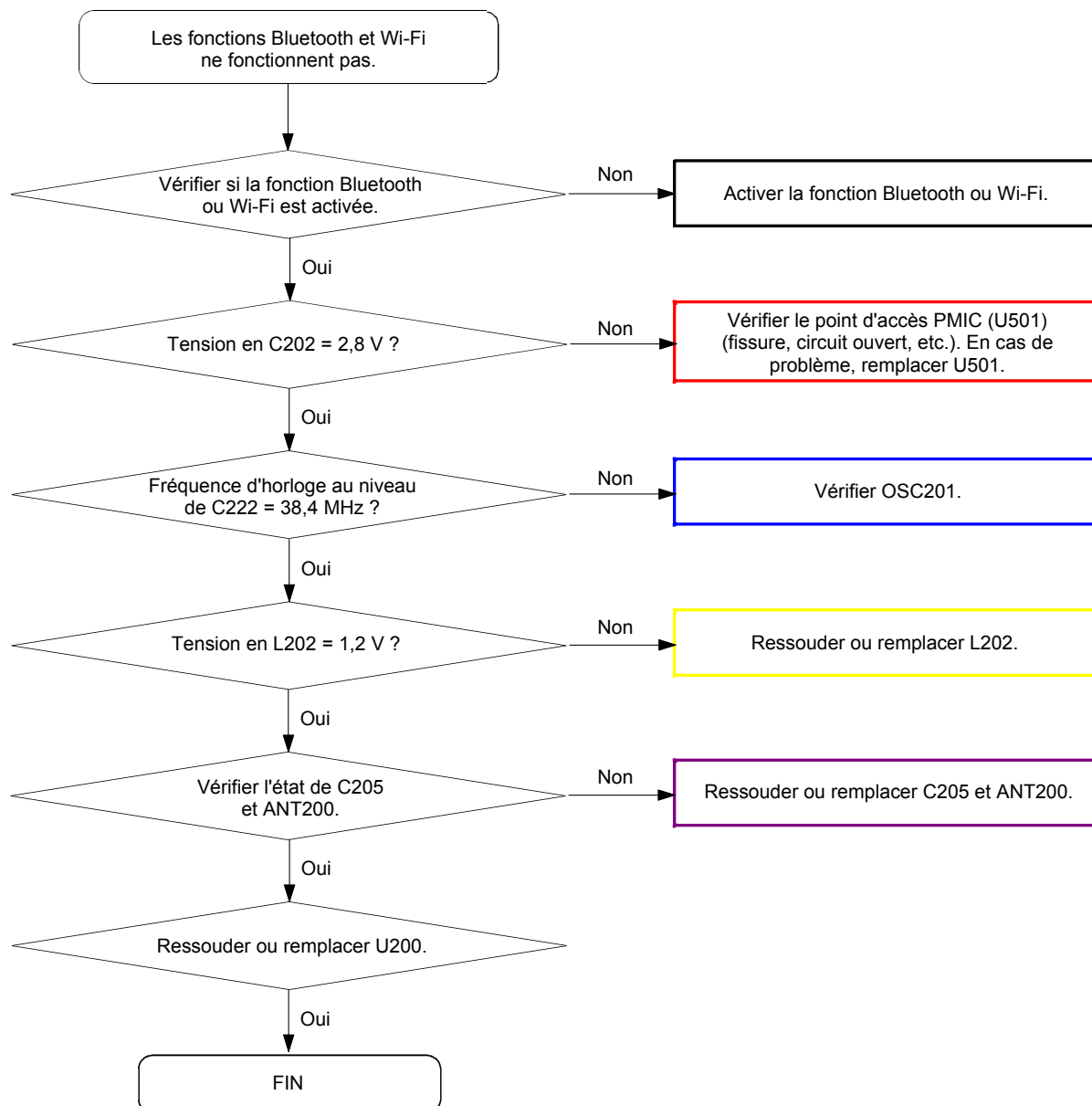


8b-3-7. Section récepteur

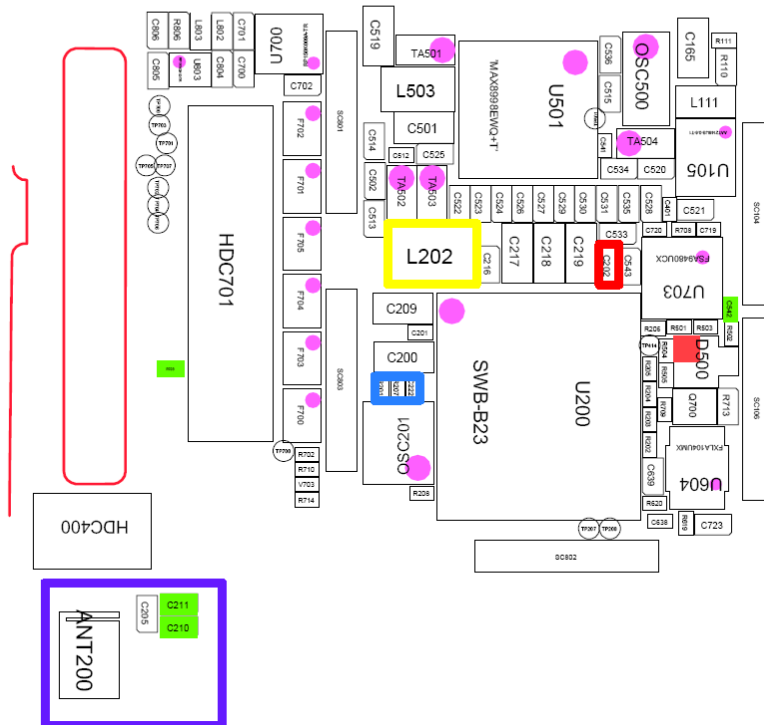
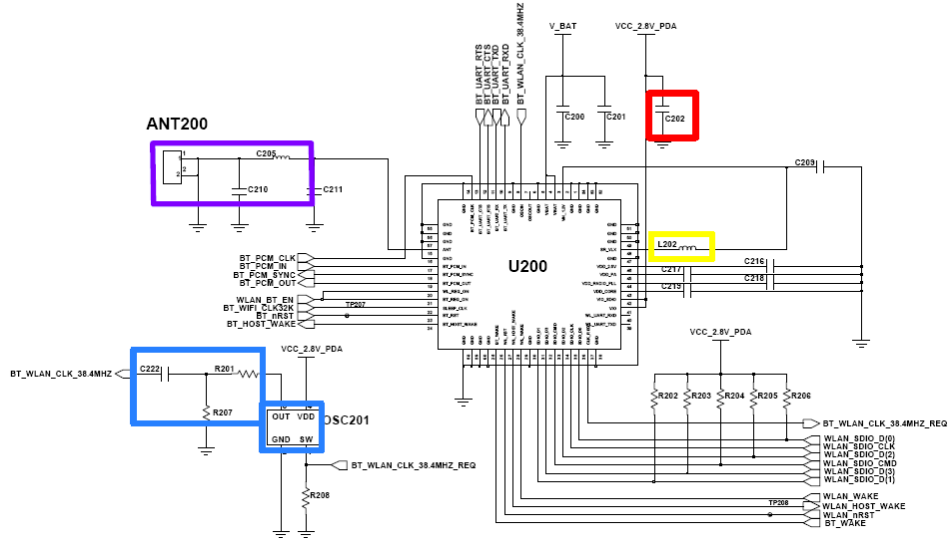




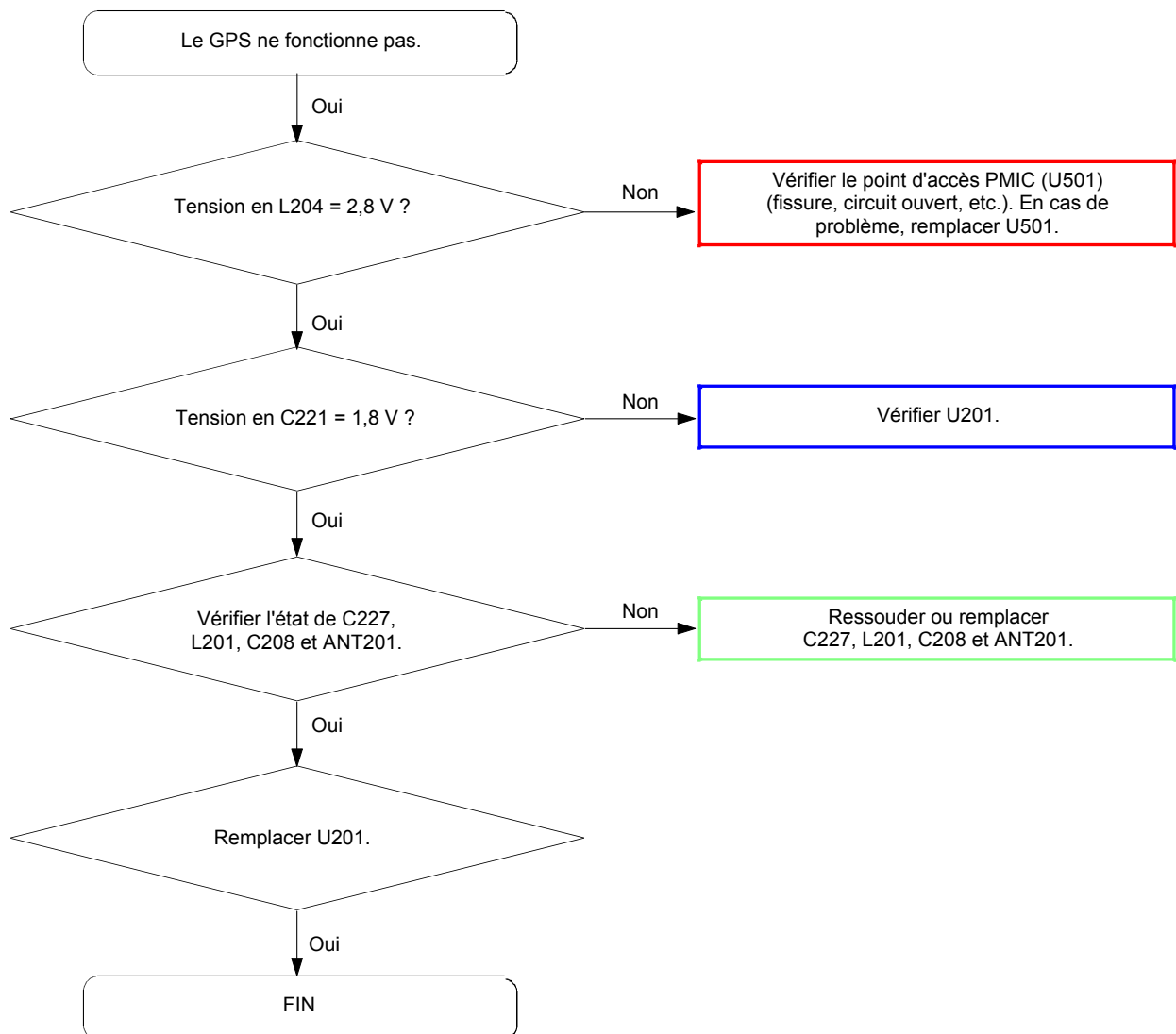
8b-3-8. Fonctions Bluetooth/Wi-Fi



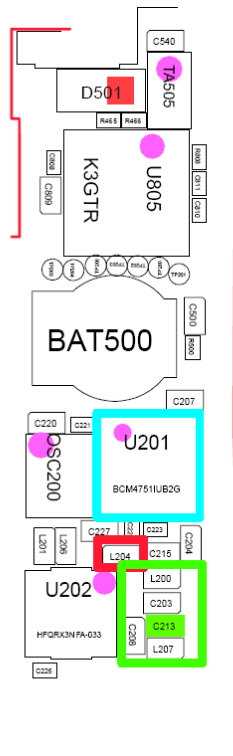
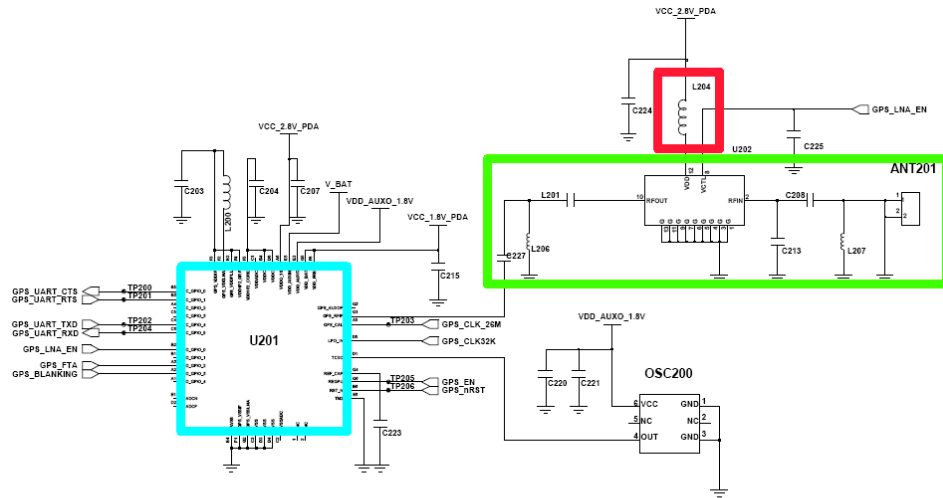
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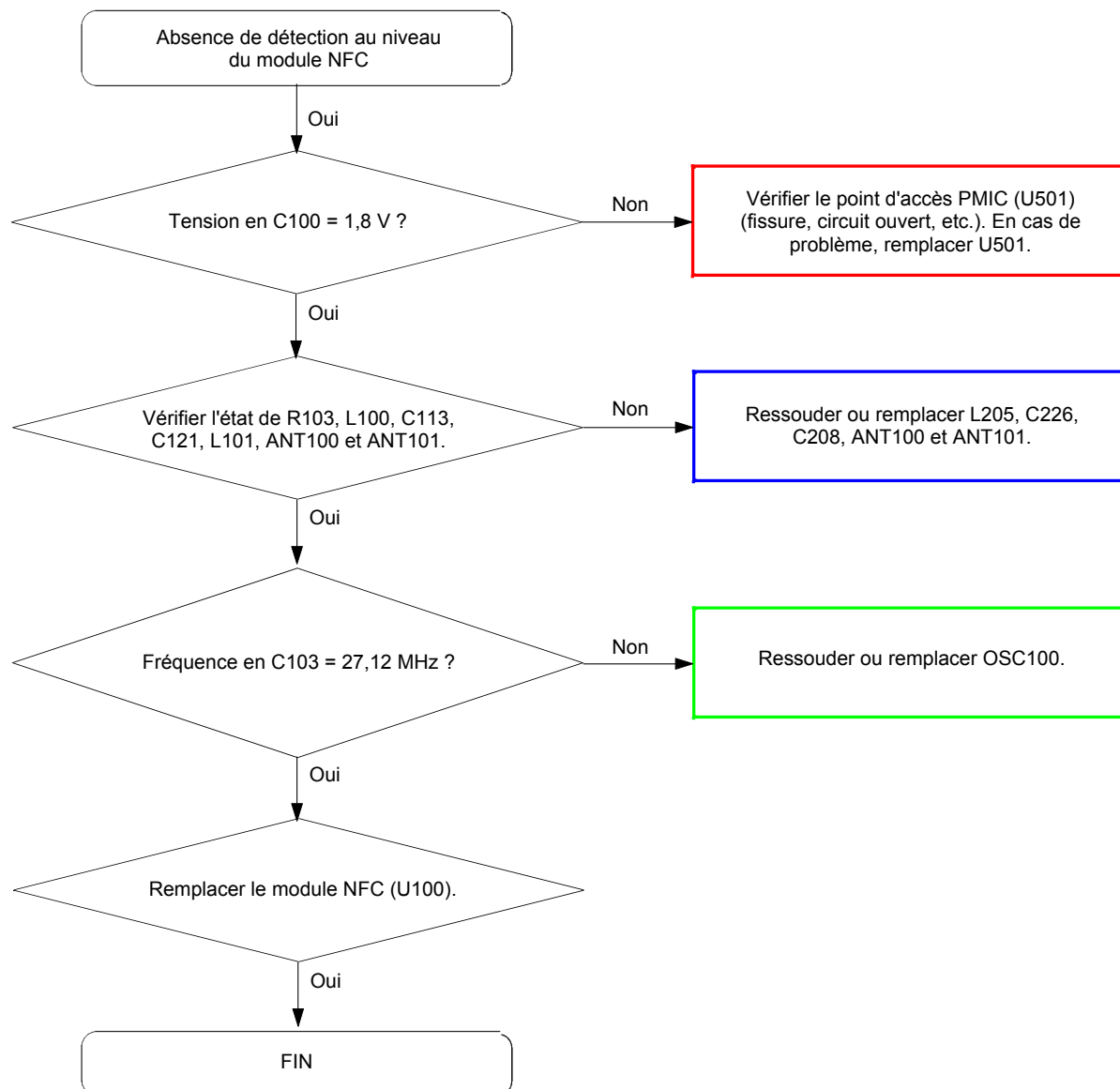
8b-3-9. GPS



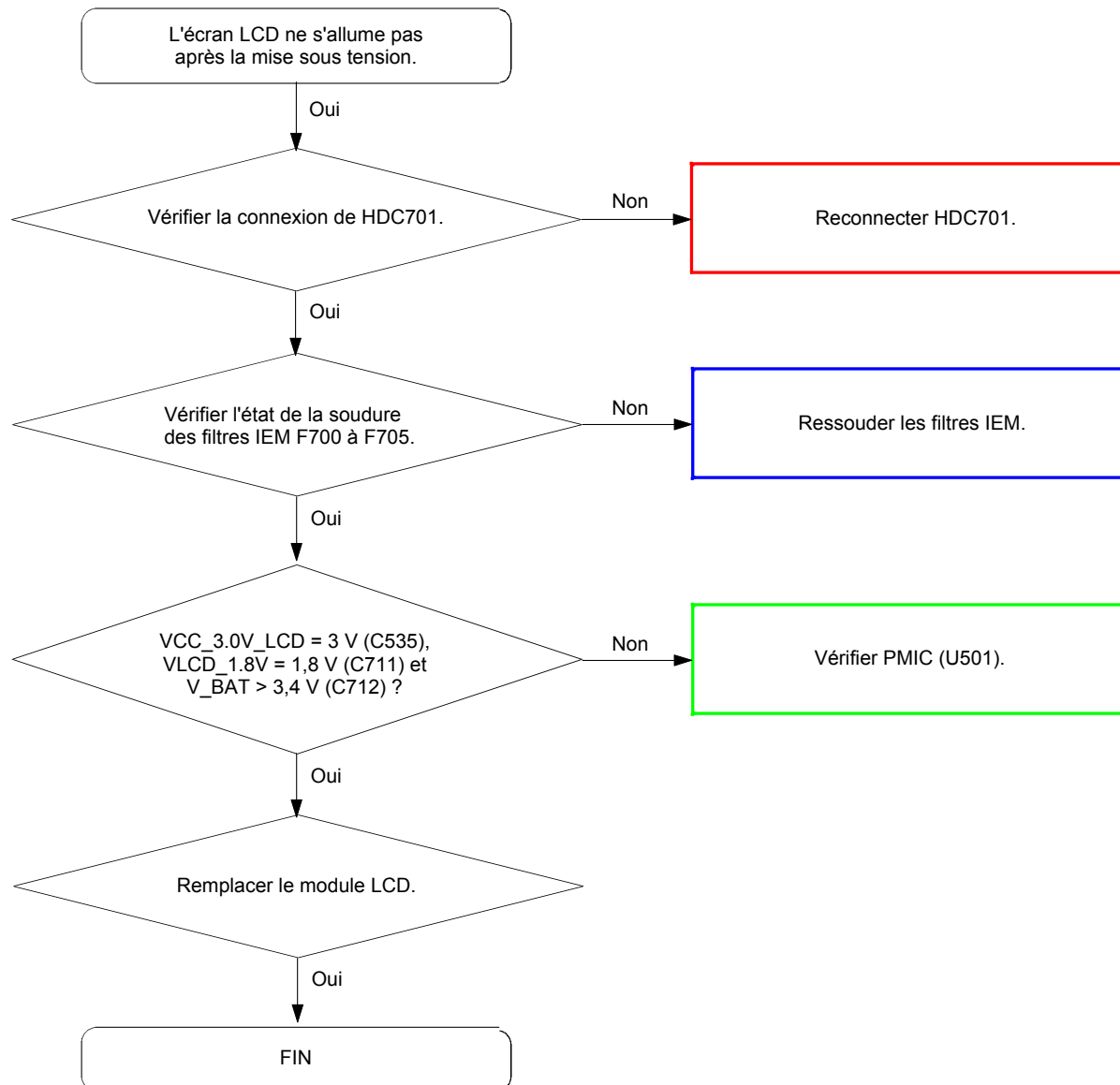
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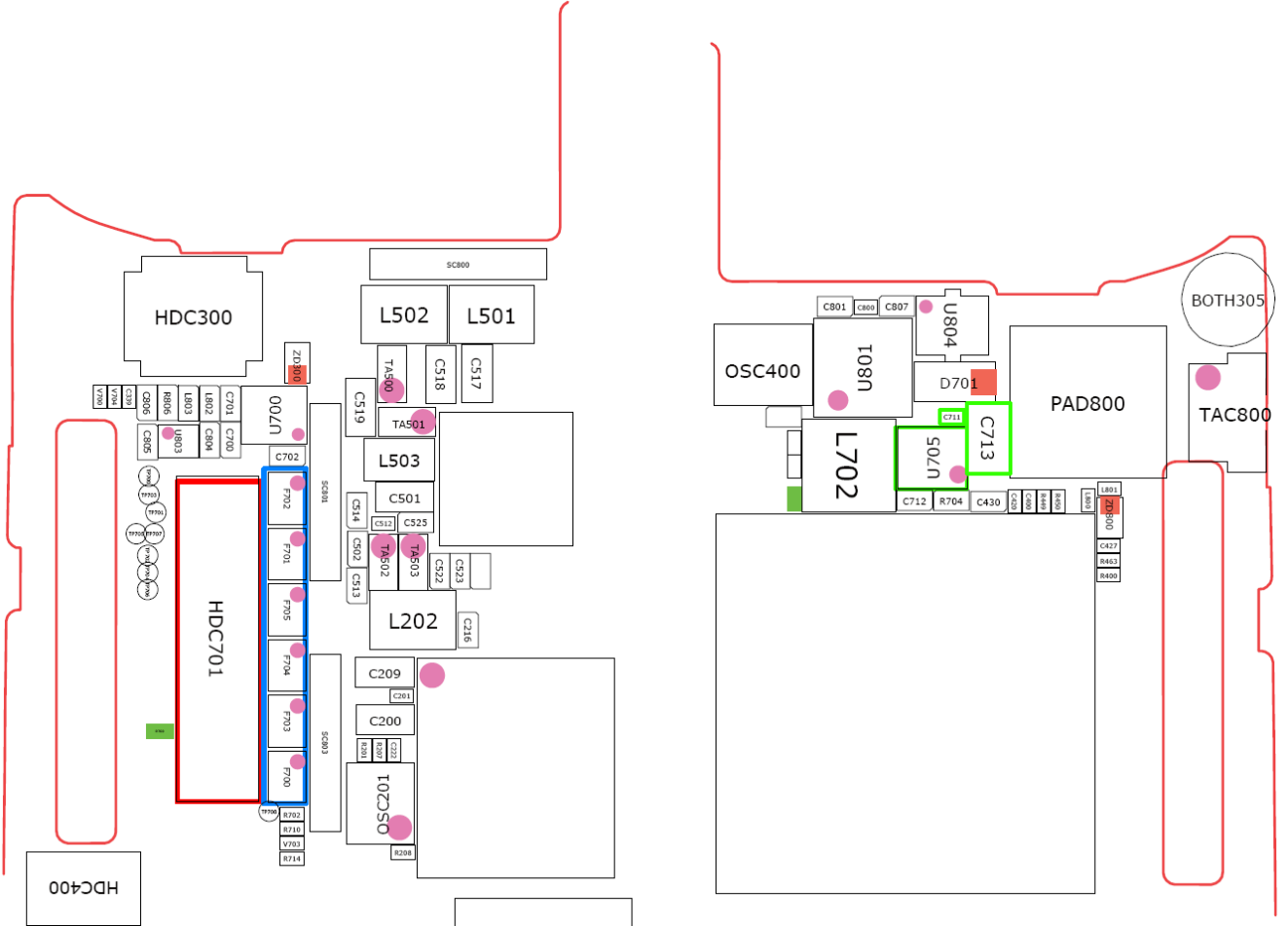
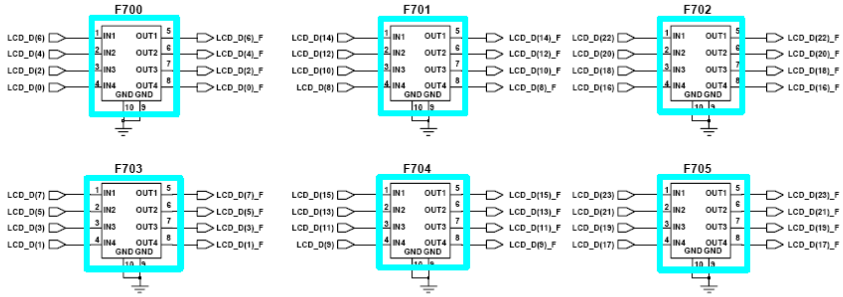
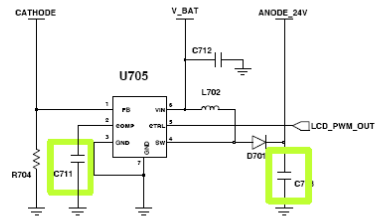
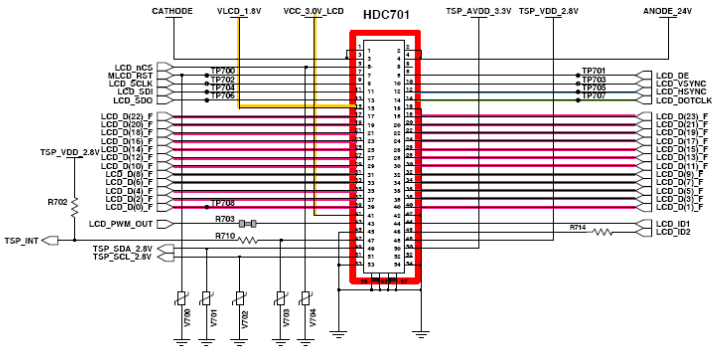


8b-3-10. NFC

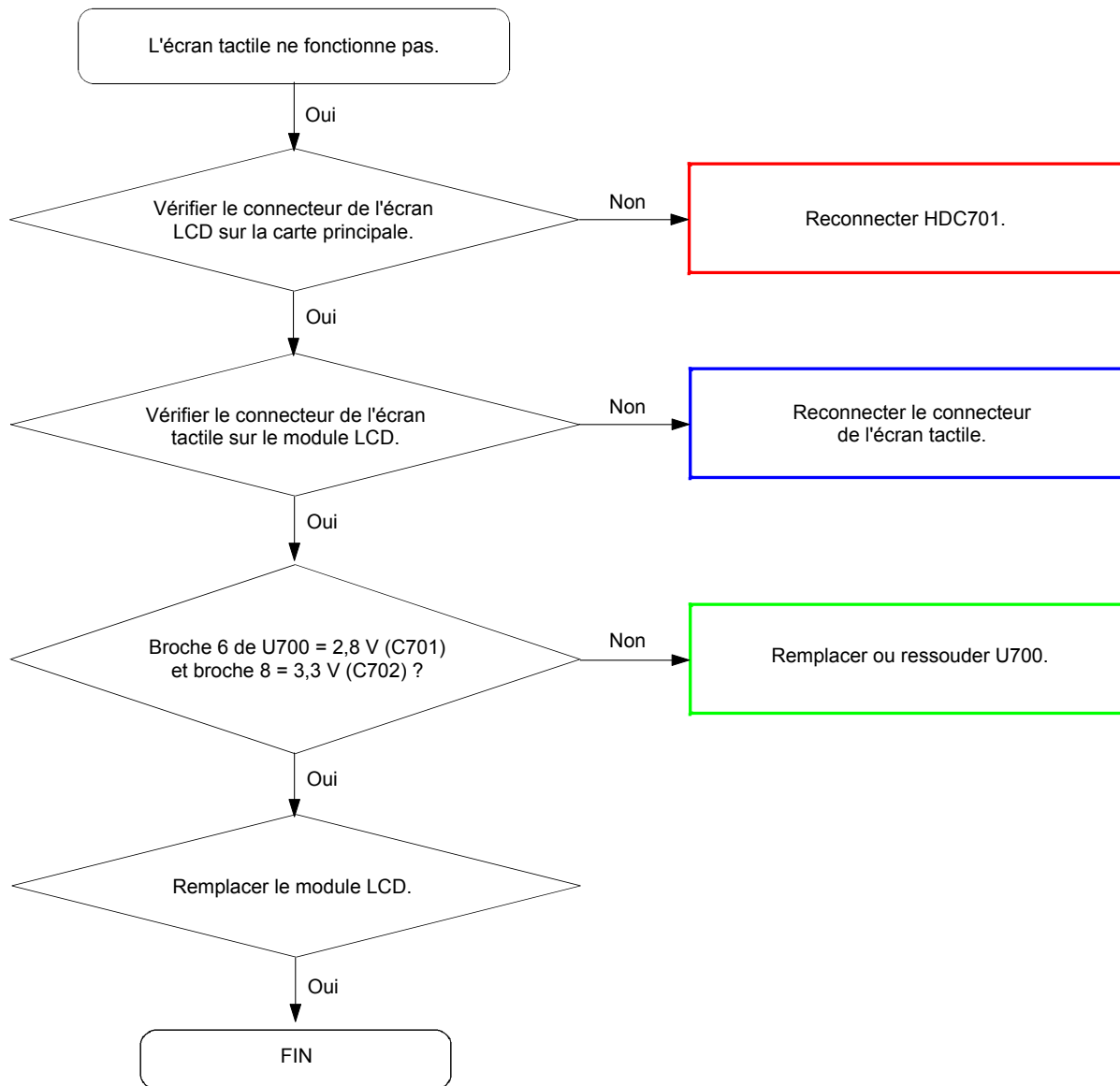


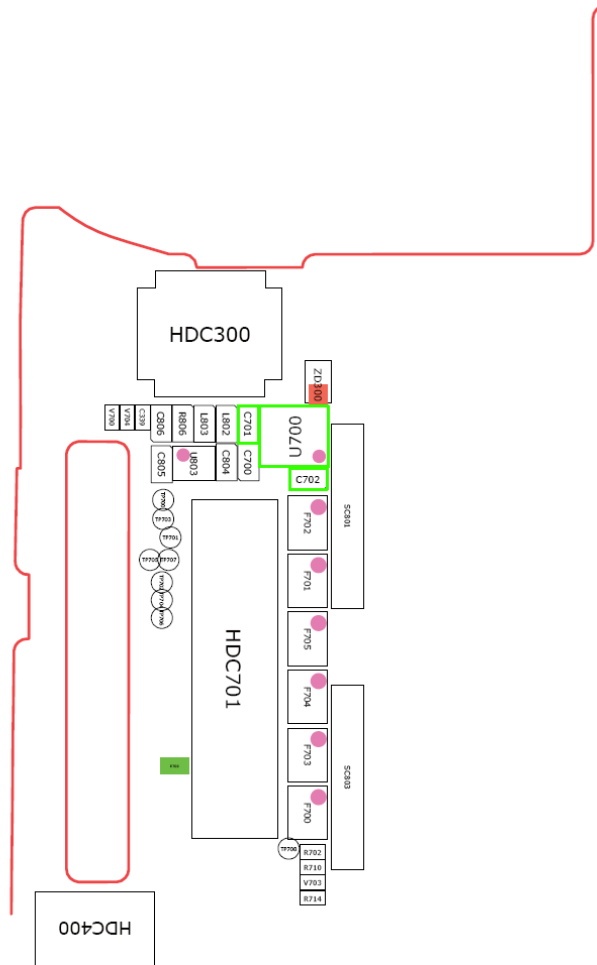
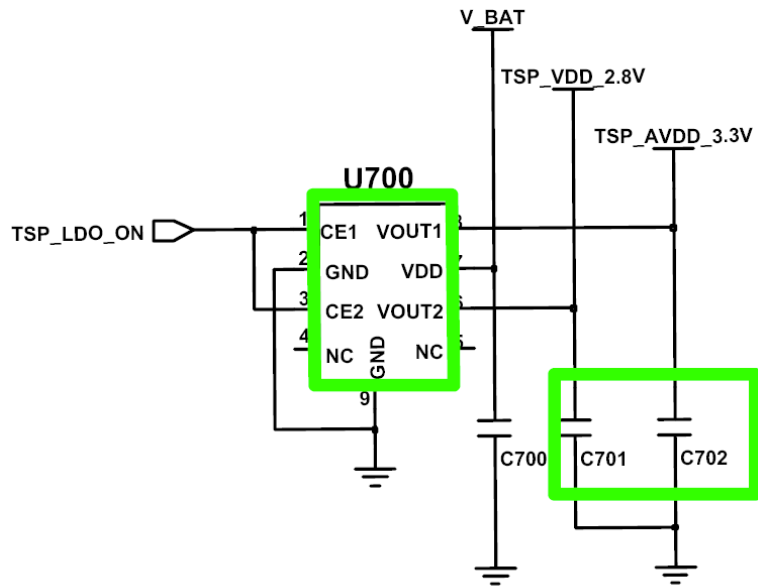
8b-3-11. Ecran LCD



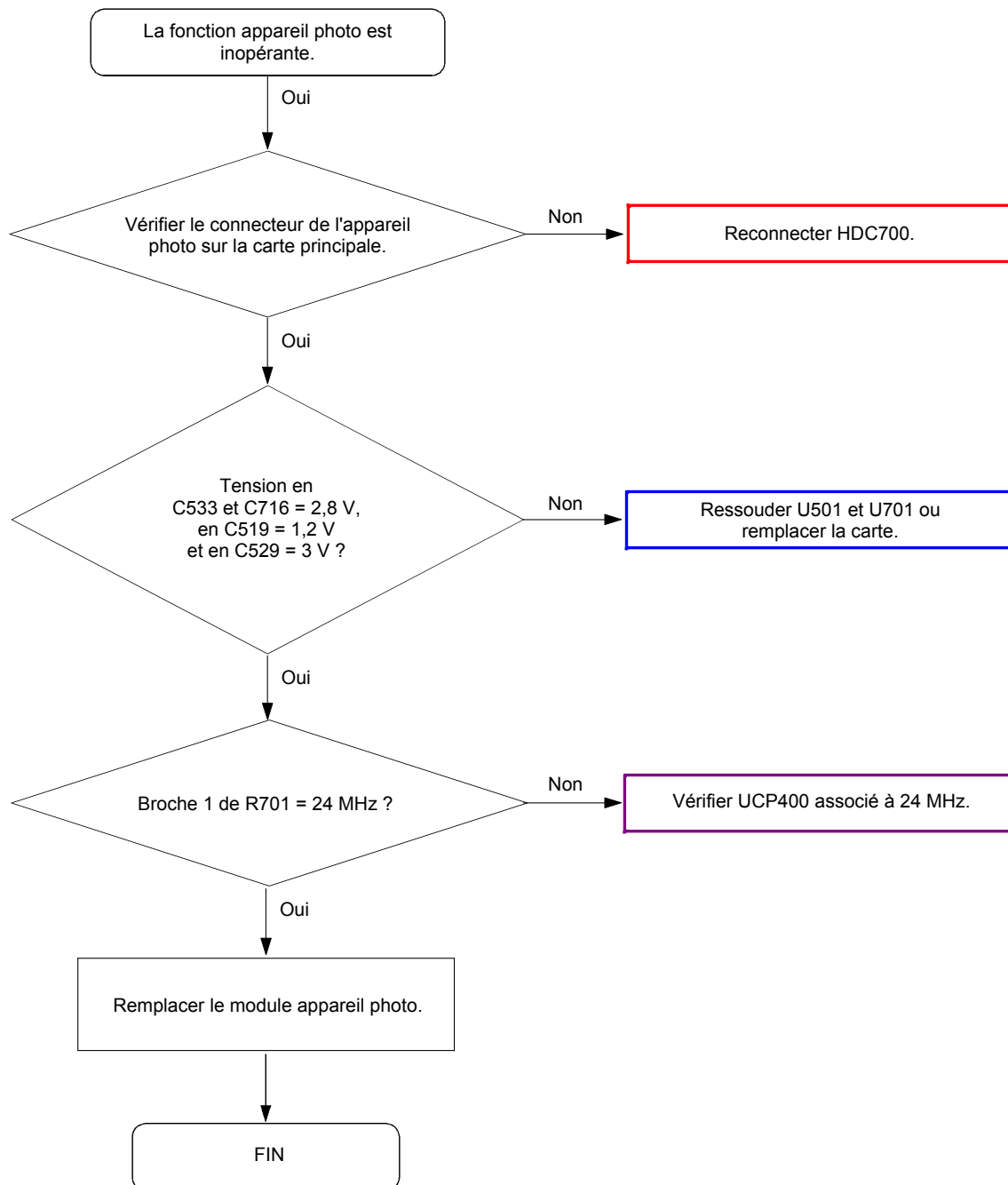


8b-3-12. Ecran tactile

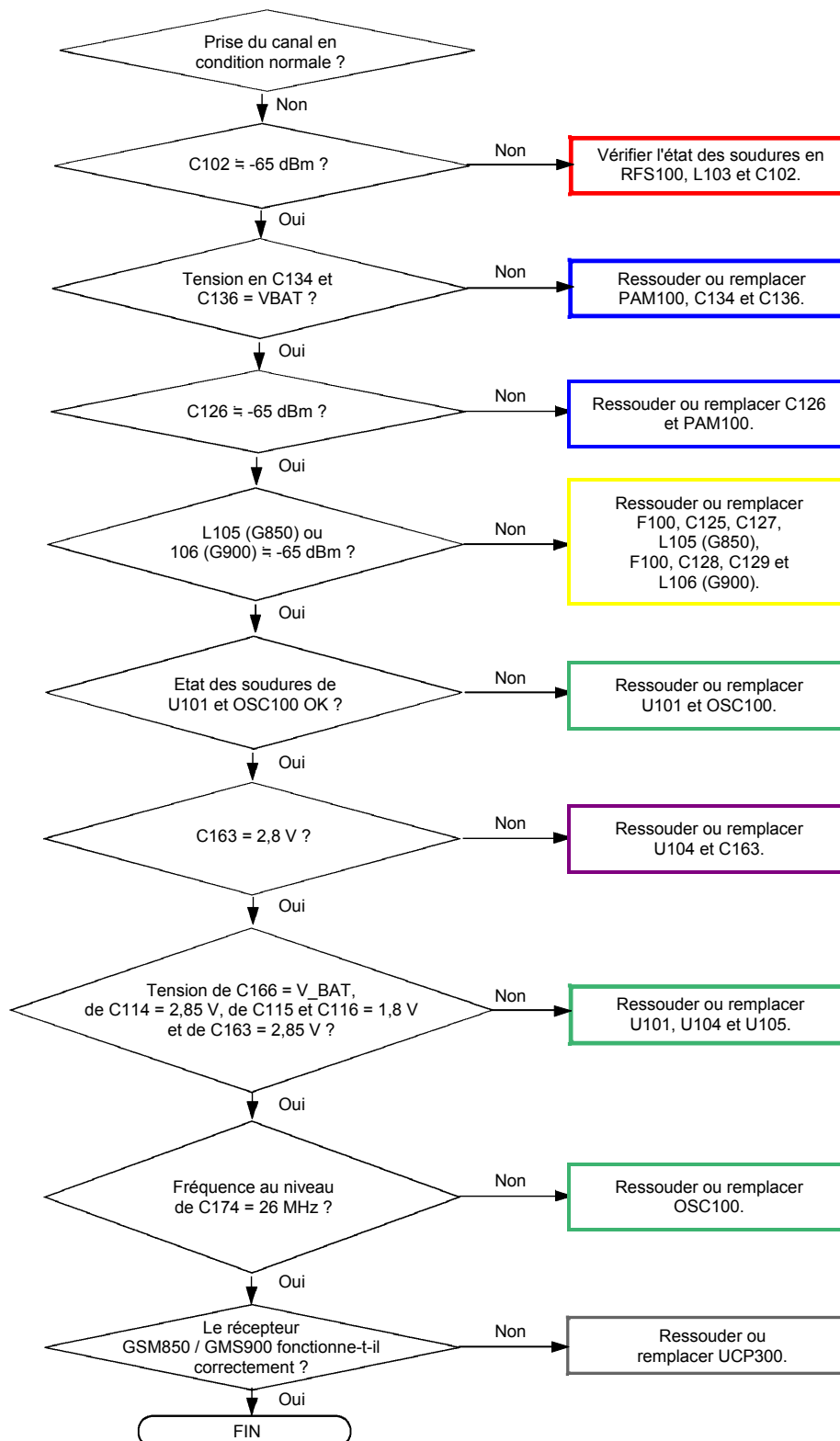


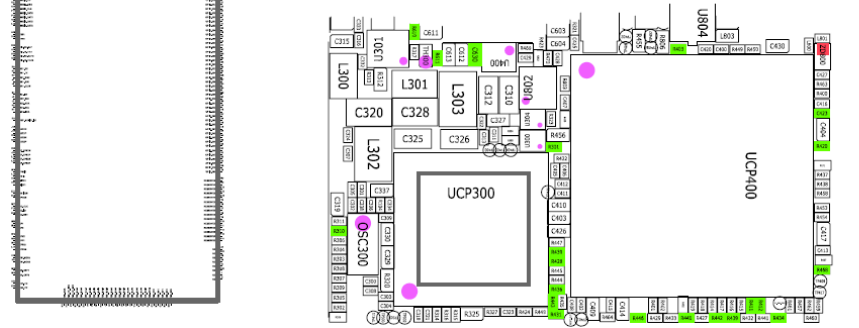
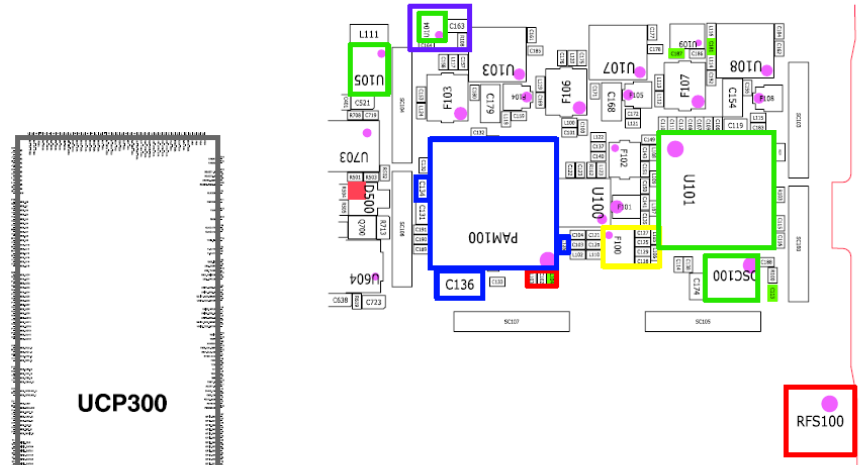
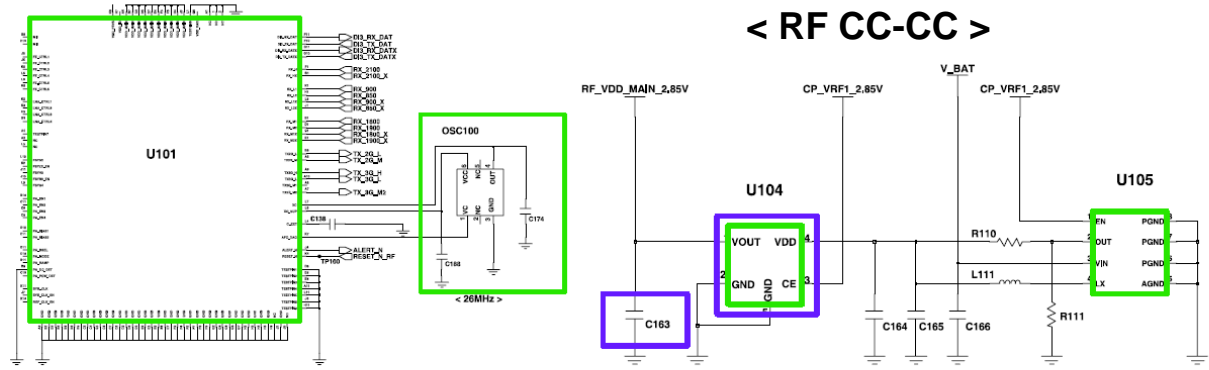
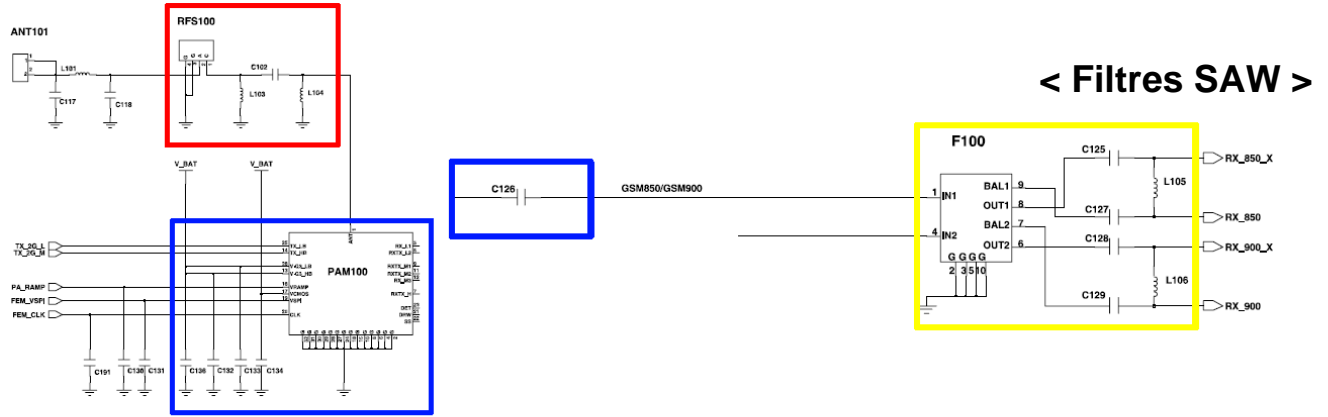


8b-3-13. Appareil photo 5 mégapixels et VGA

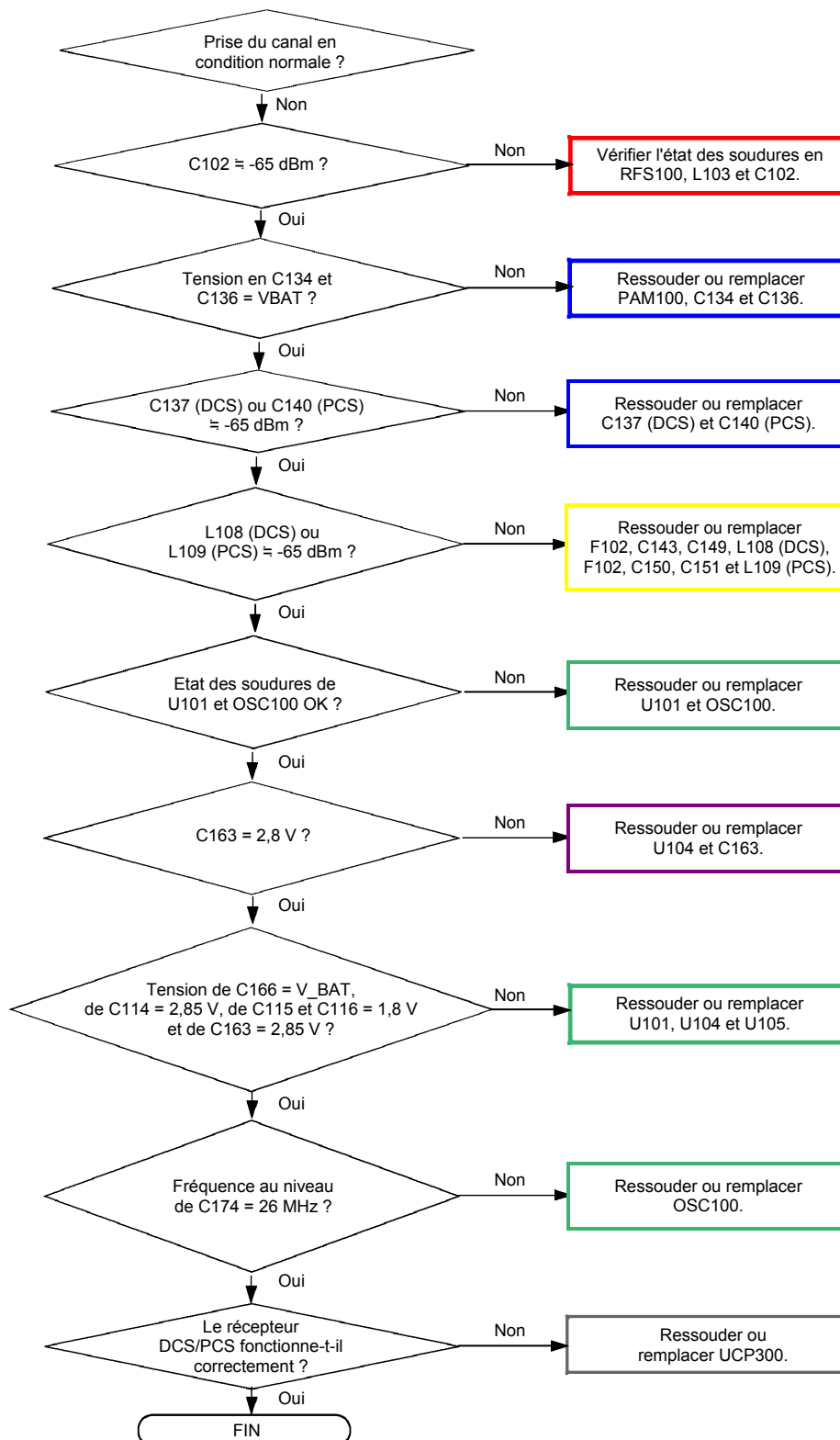


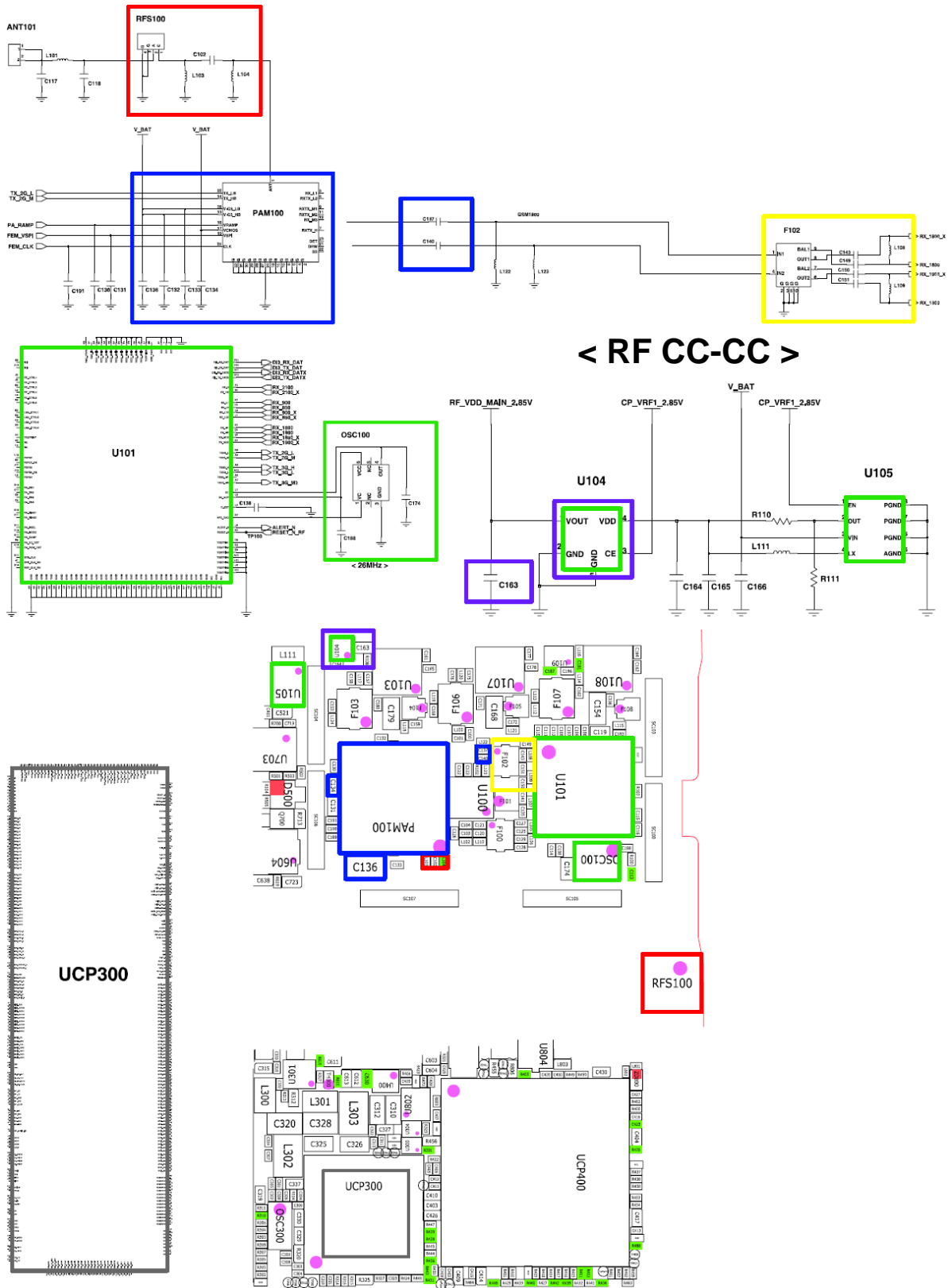
8b-3-14. Récepteur GSM850 / GSM900



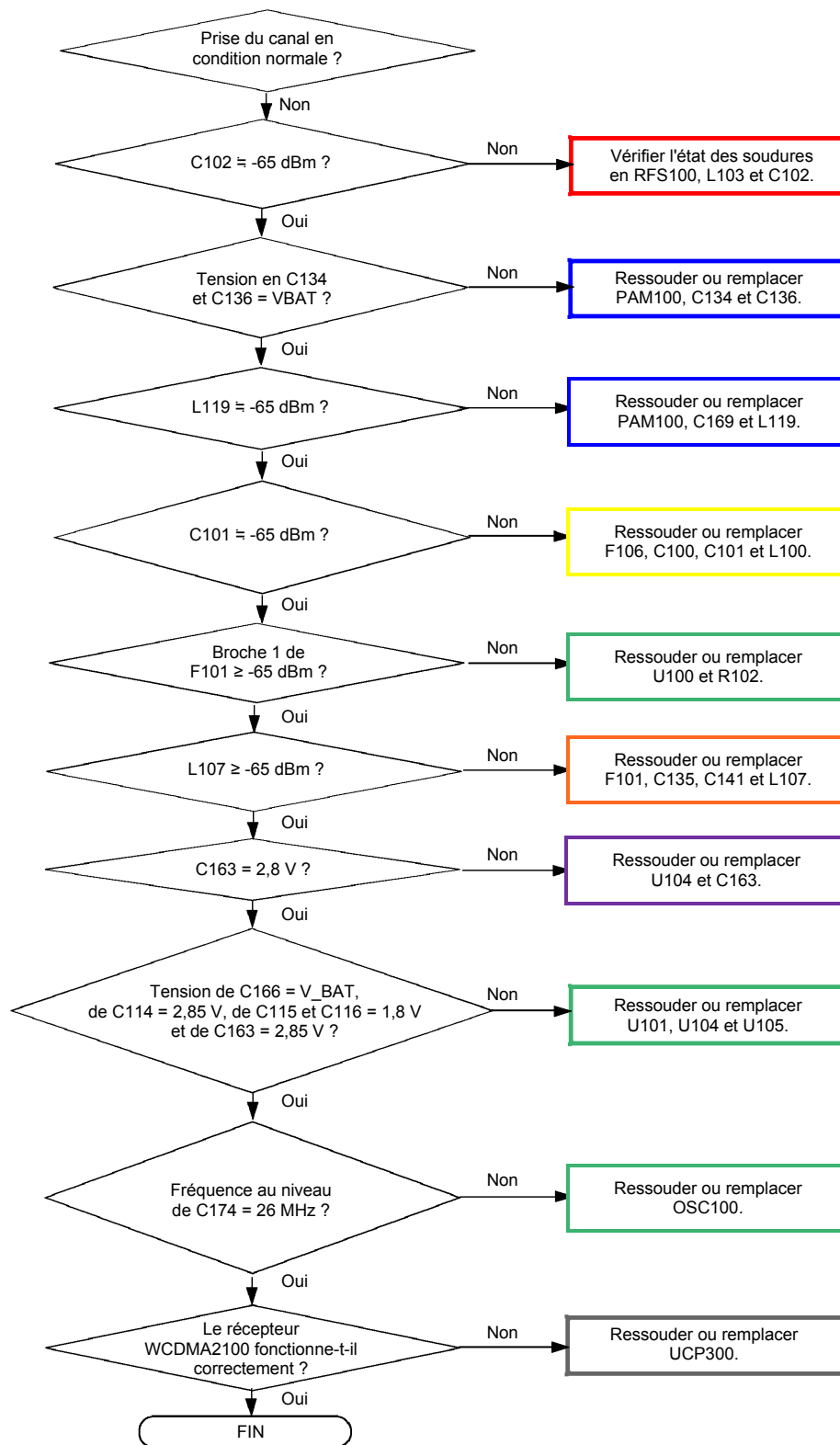


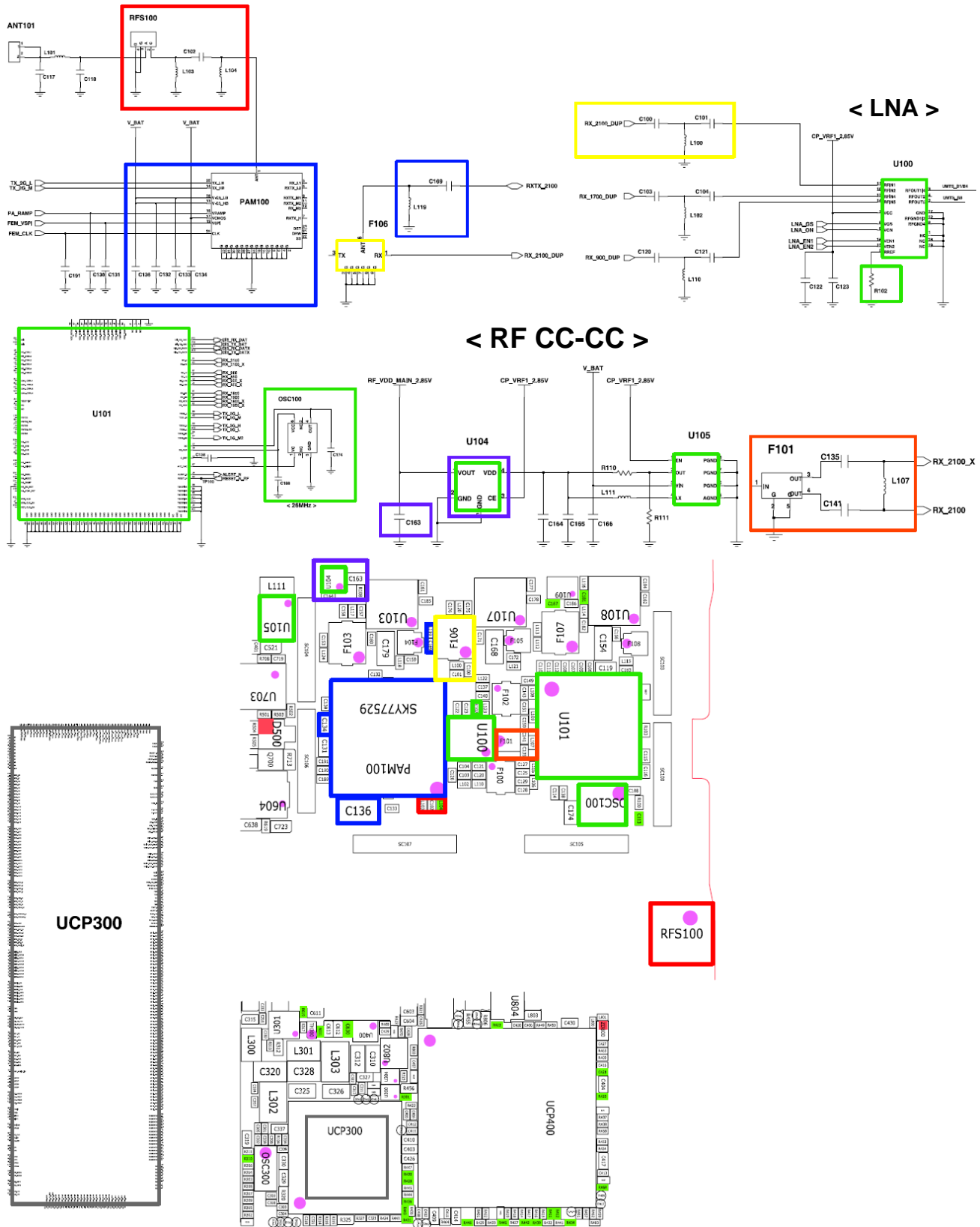
8b-3-15. Récepteur DCS (GSM1800) / PCS (GSM1900)



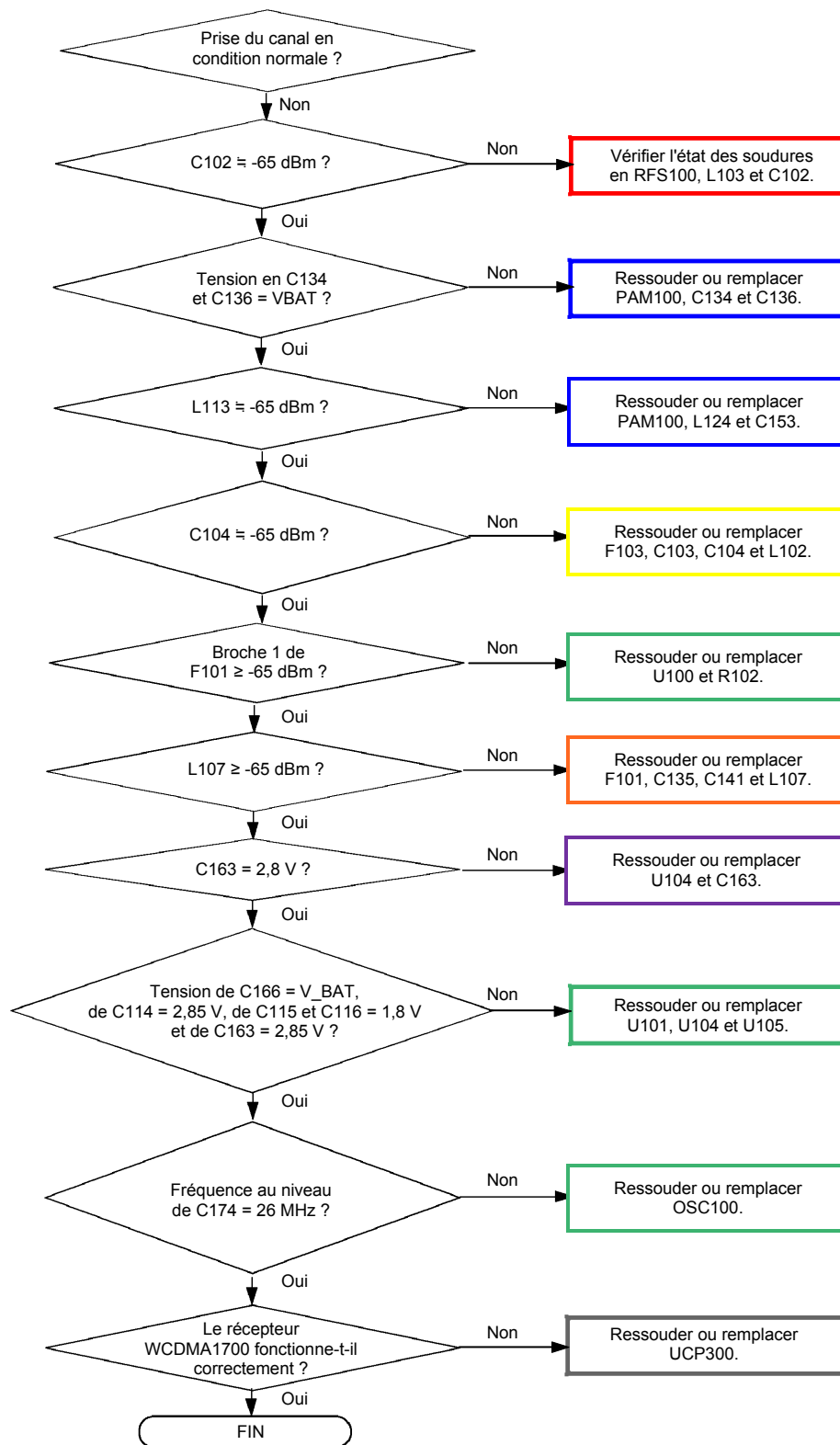


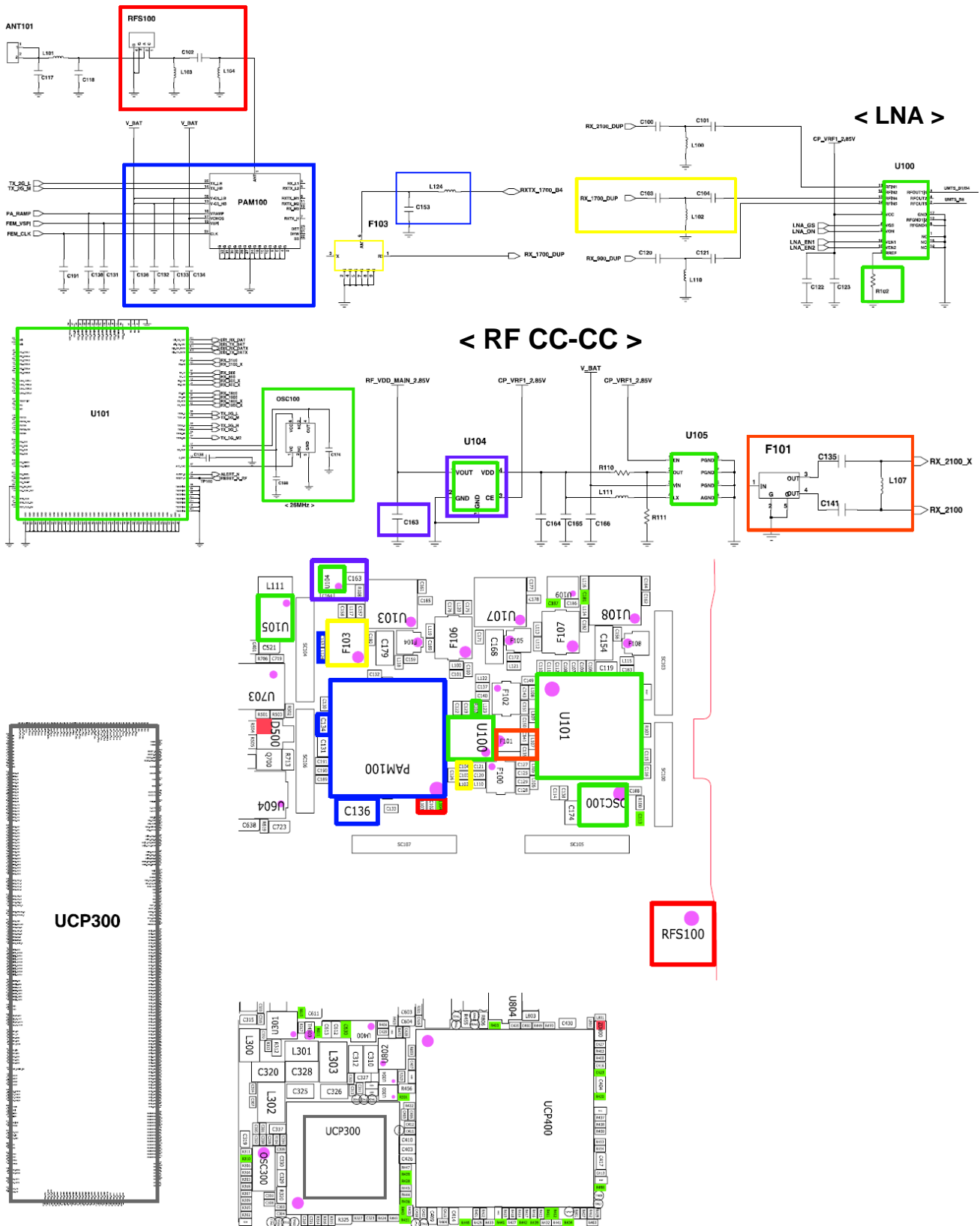
8b-3-16. Récepteur WCDMA2100



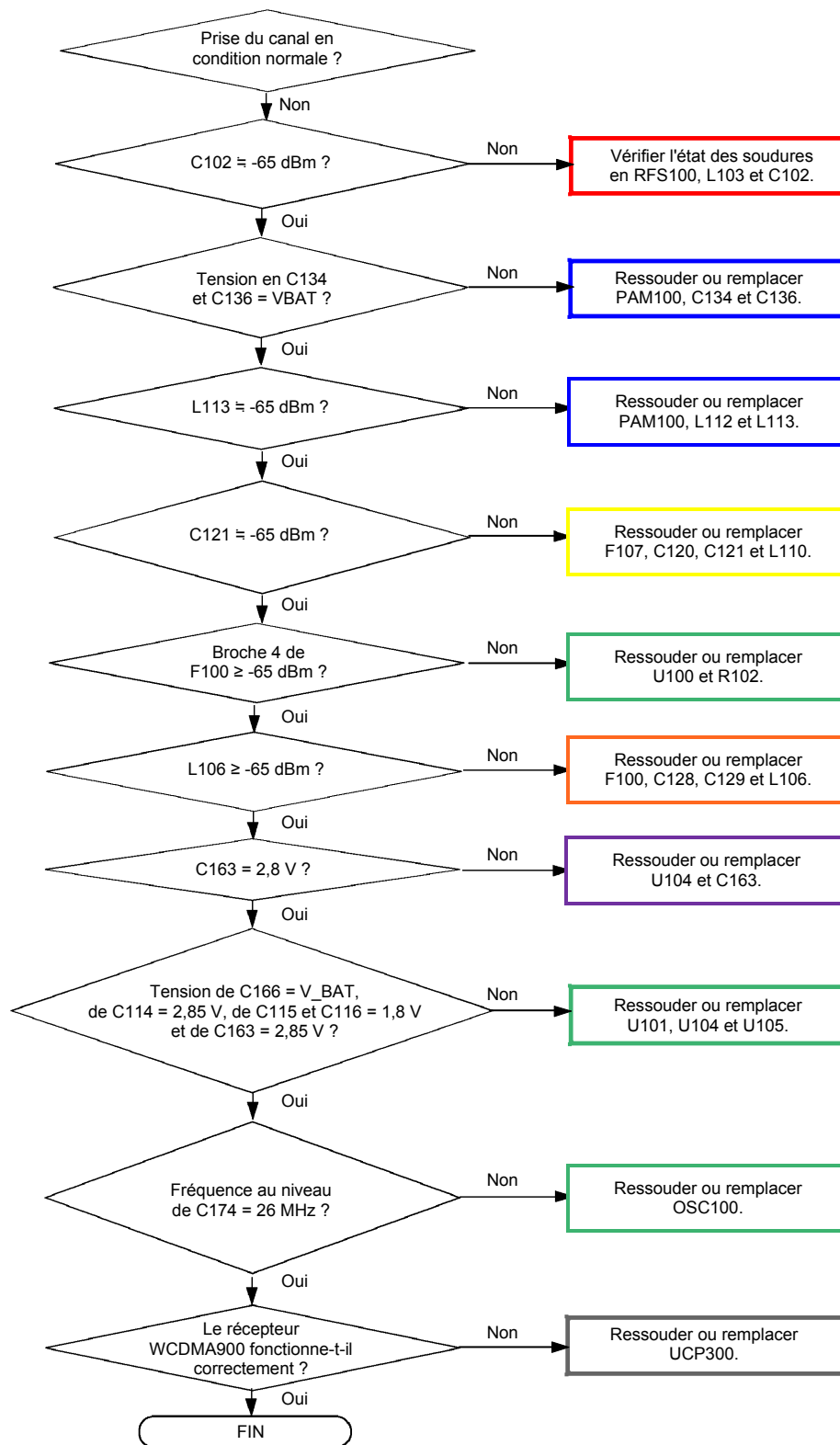


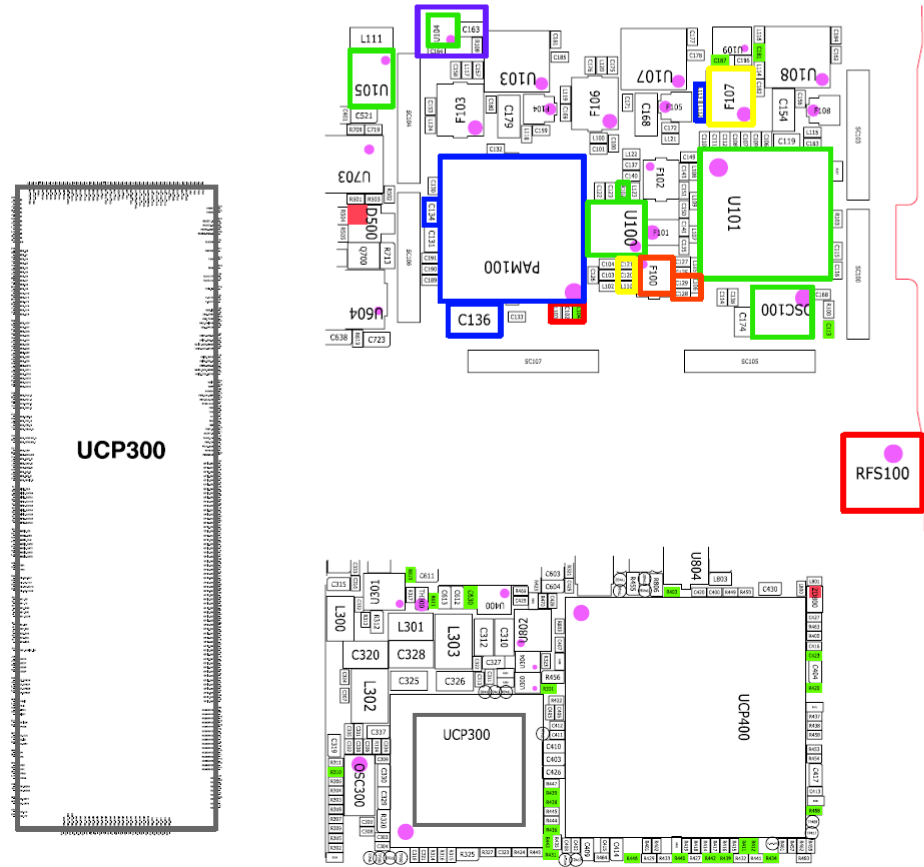
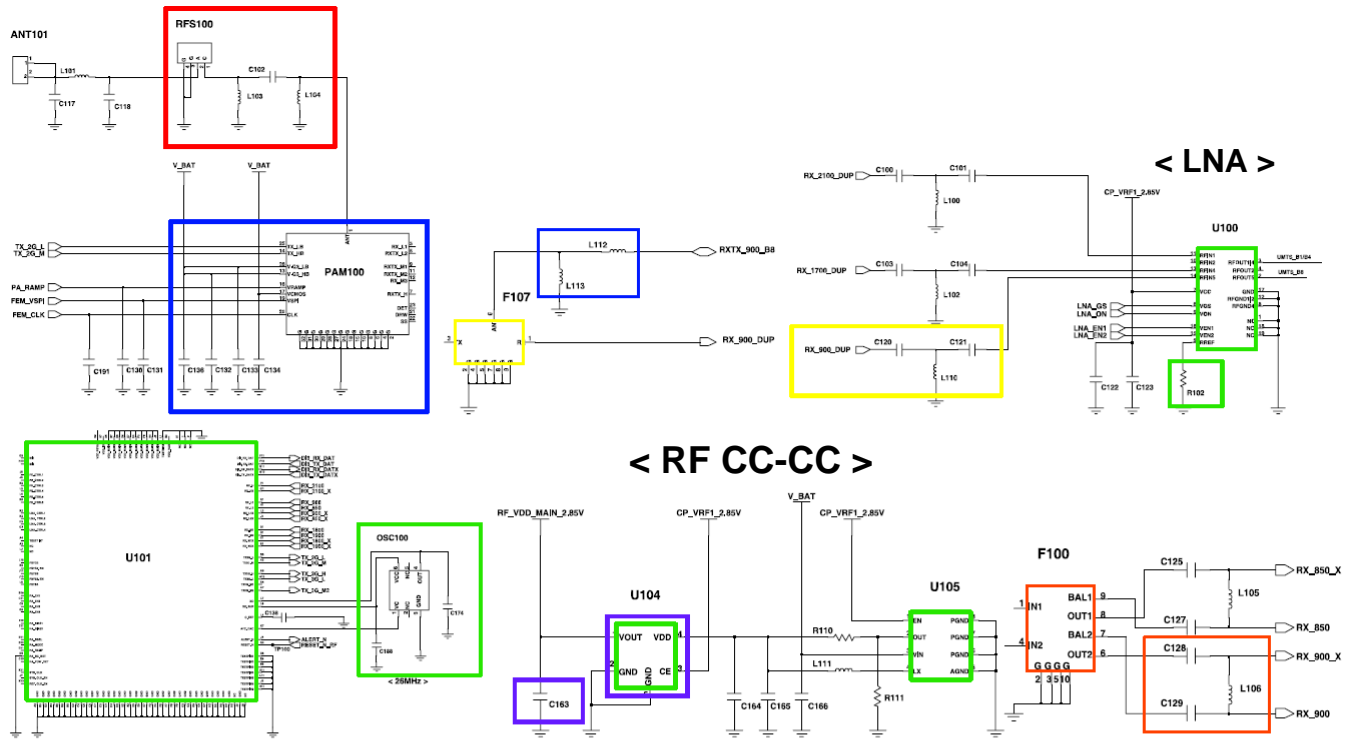
8b-3-17. Récepteur WCDMA1700



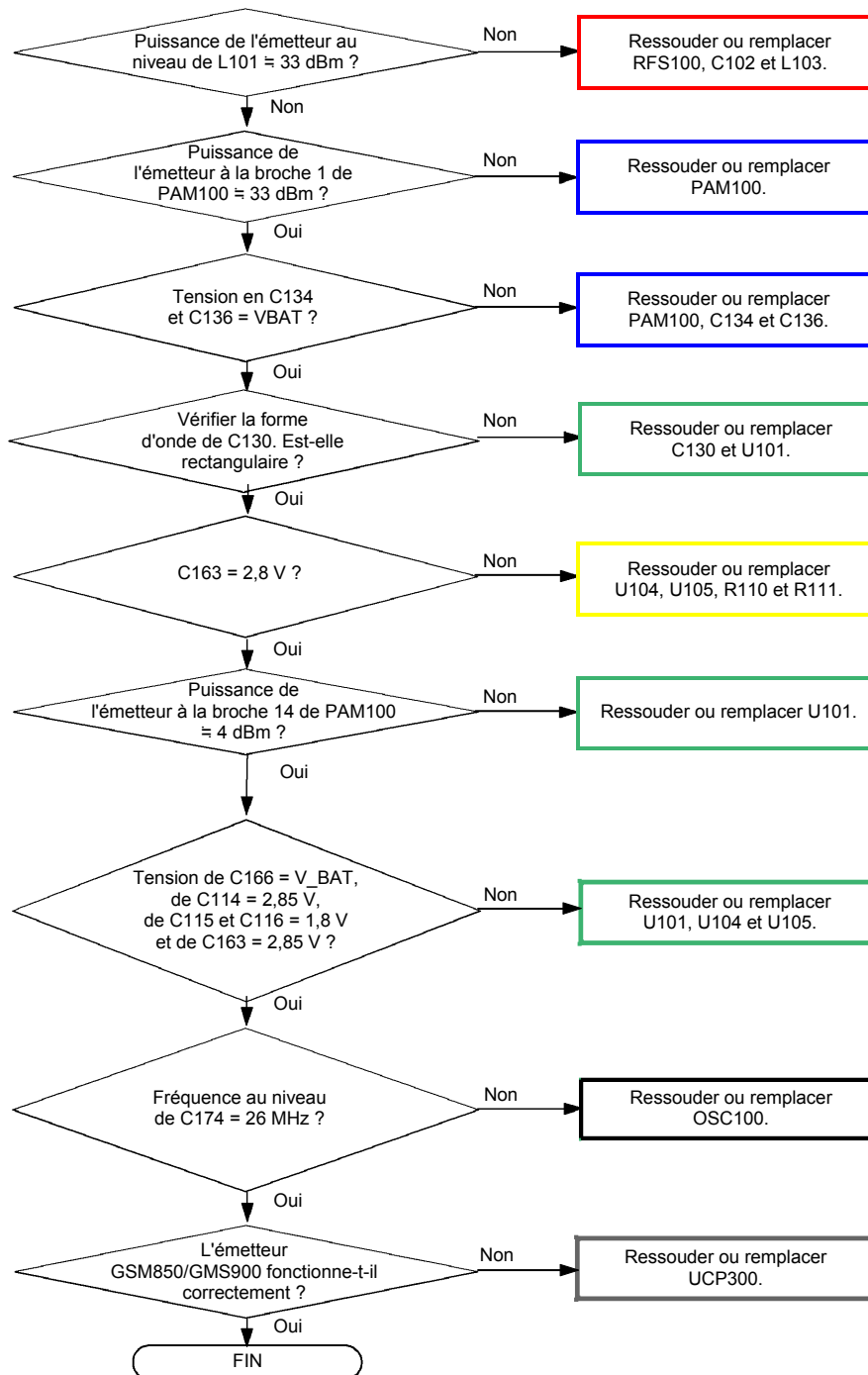


8b-3-18. Récepteur WCDMA900





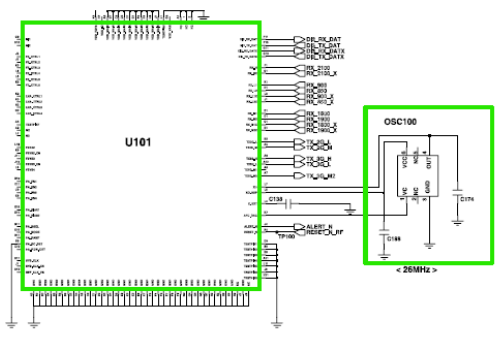
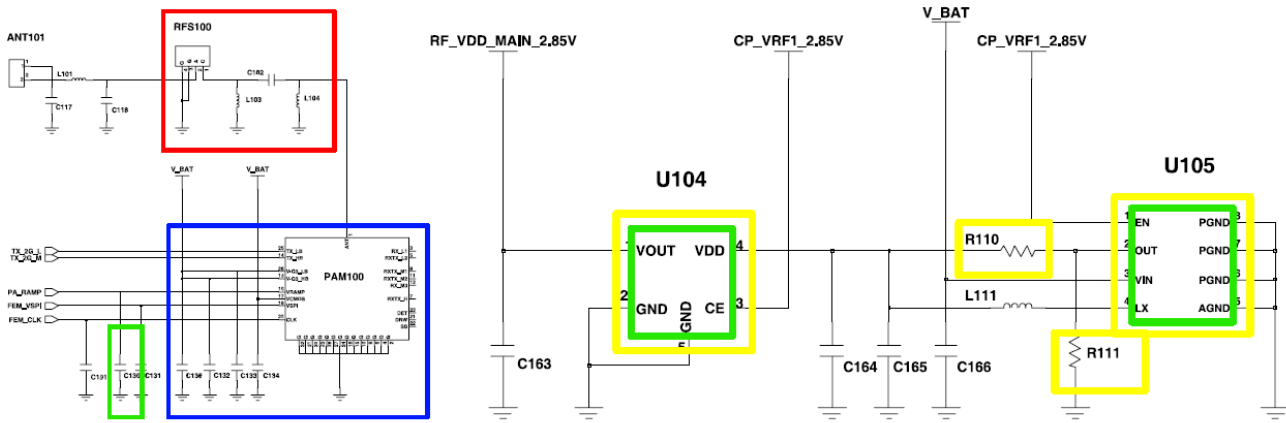
8b-3-19. Emetteur GSM850 / GSM900



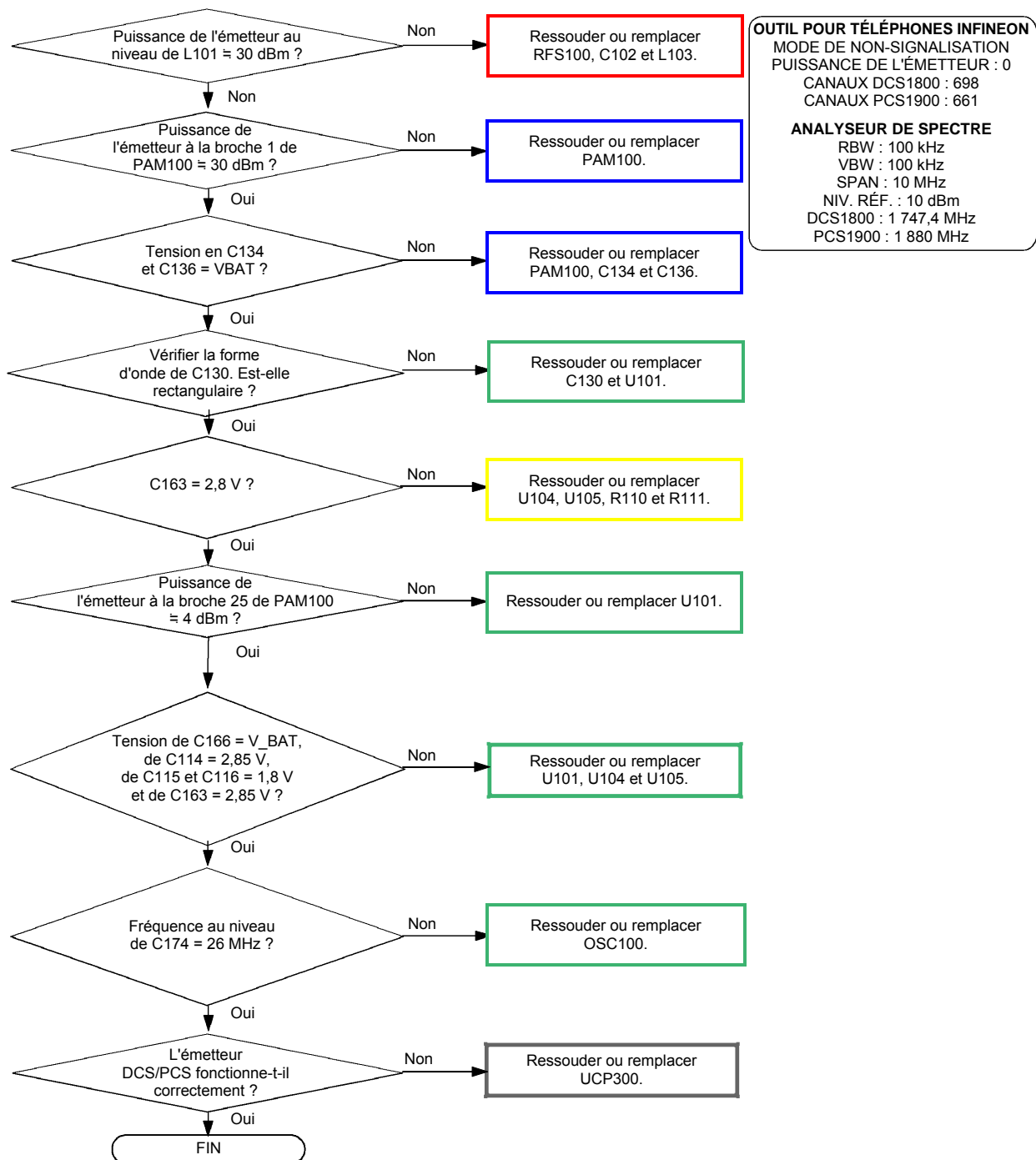
OUTIL POUR TÉLÉPHONES INFINEON
 MODE DE NON-SIGNALISATION
 PUISSANCE DE L'ÉMETTEUR : 5
 CANAUX GSM850 : 190
 CANAUX GSM900 : 621

ANALYSEUR DE SPECTRE
 RBW : 100 kHz
 VBW : 100 kHz
 SPAN : 10 MHz
 NIV. RÉF. : 10 dBm
 GSM850 : 836,6 MHz
 GSM900 : 902,4 MHz

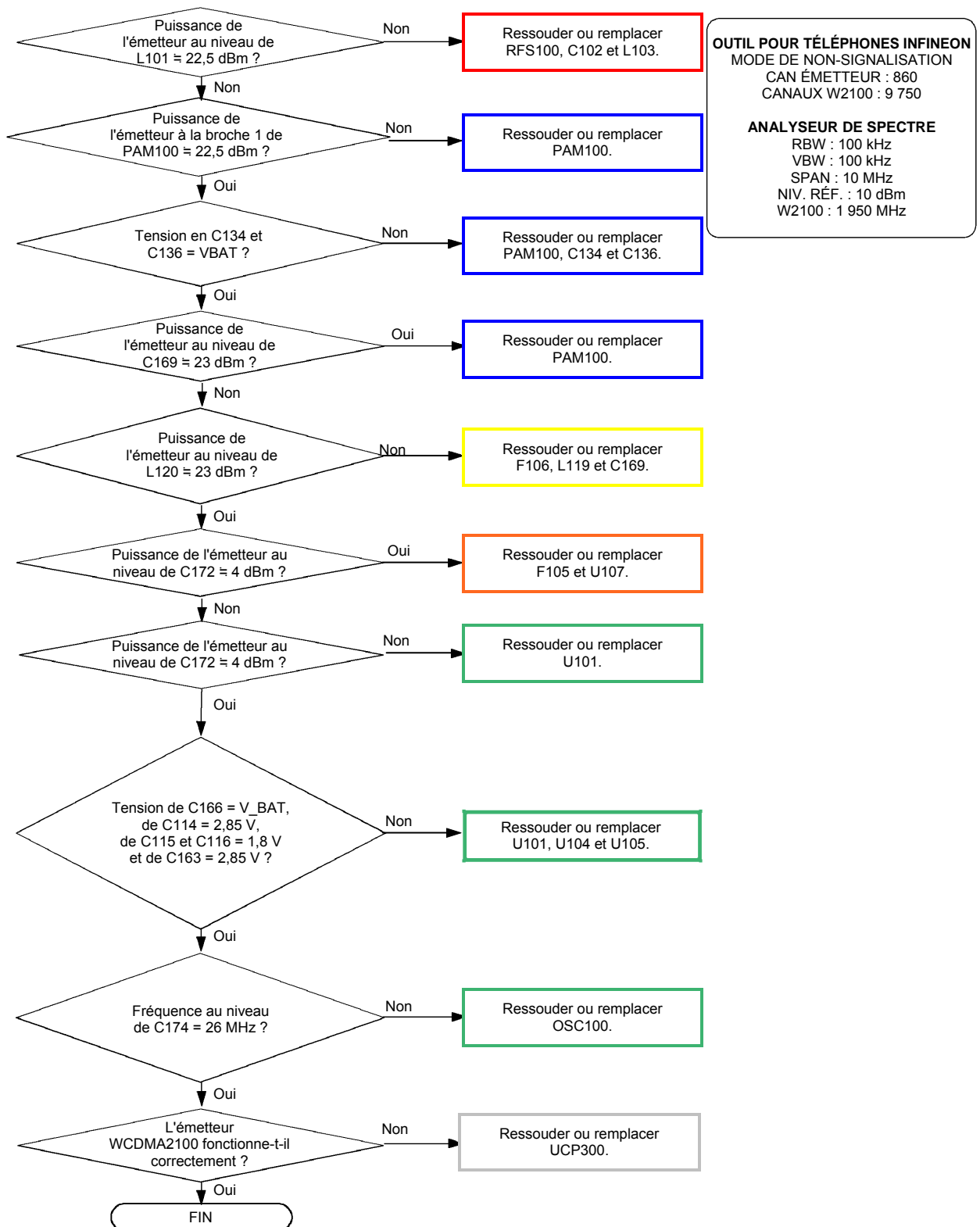
< RF CC-CC >

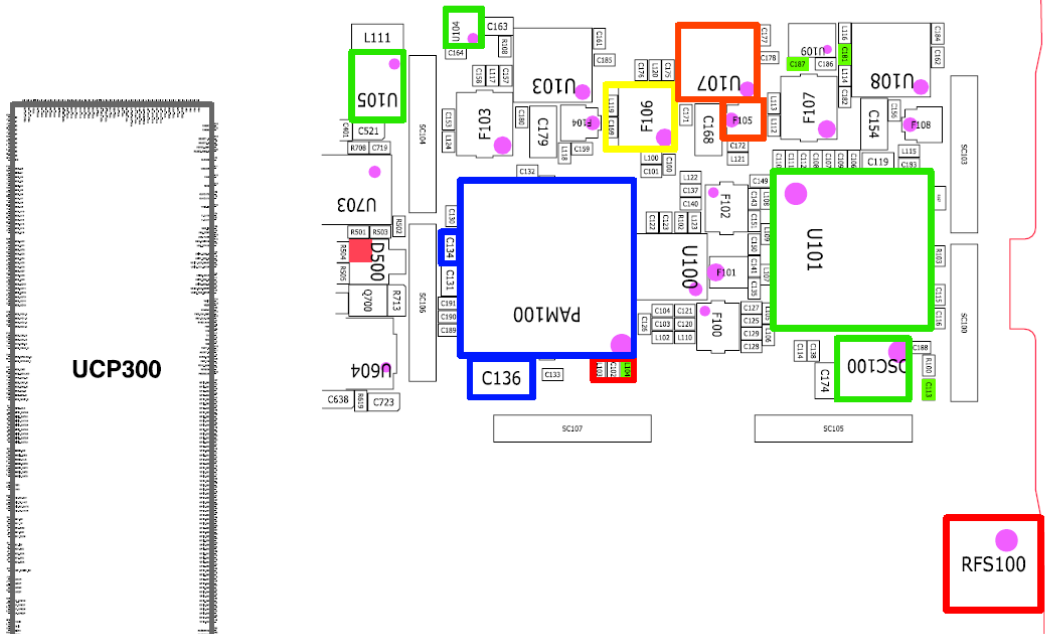
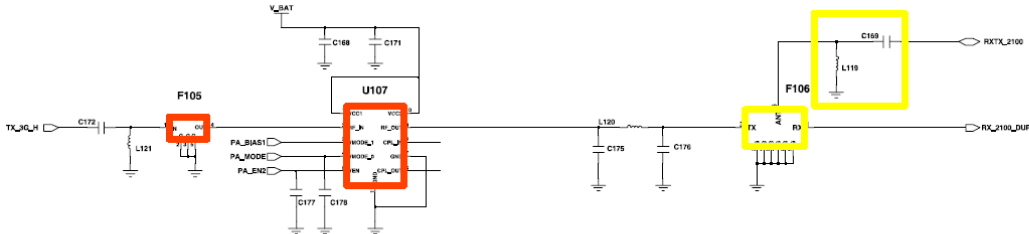
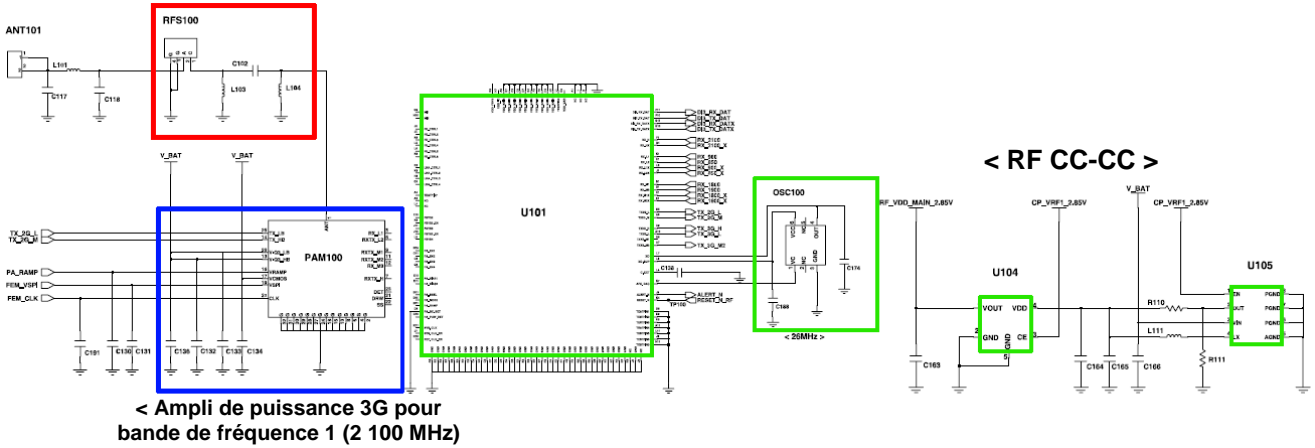


8b-3-20. Emetteur DCS (GSM1800) / PCS (GSM1900)

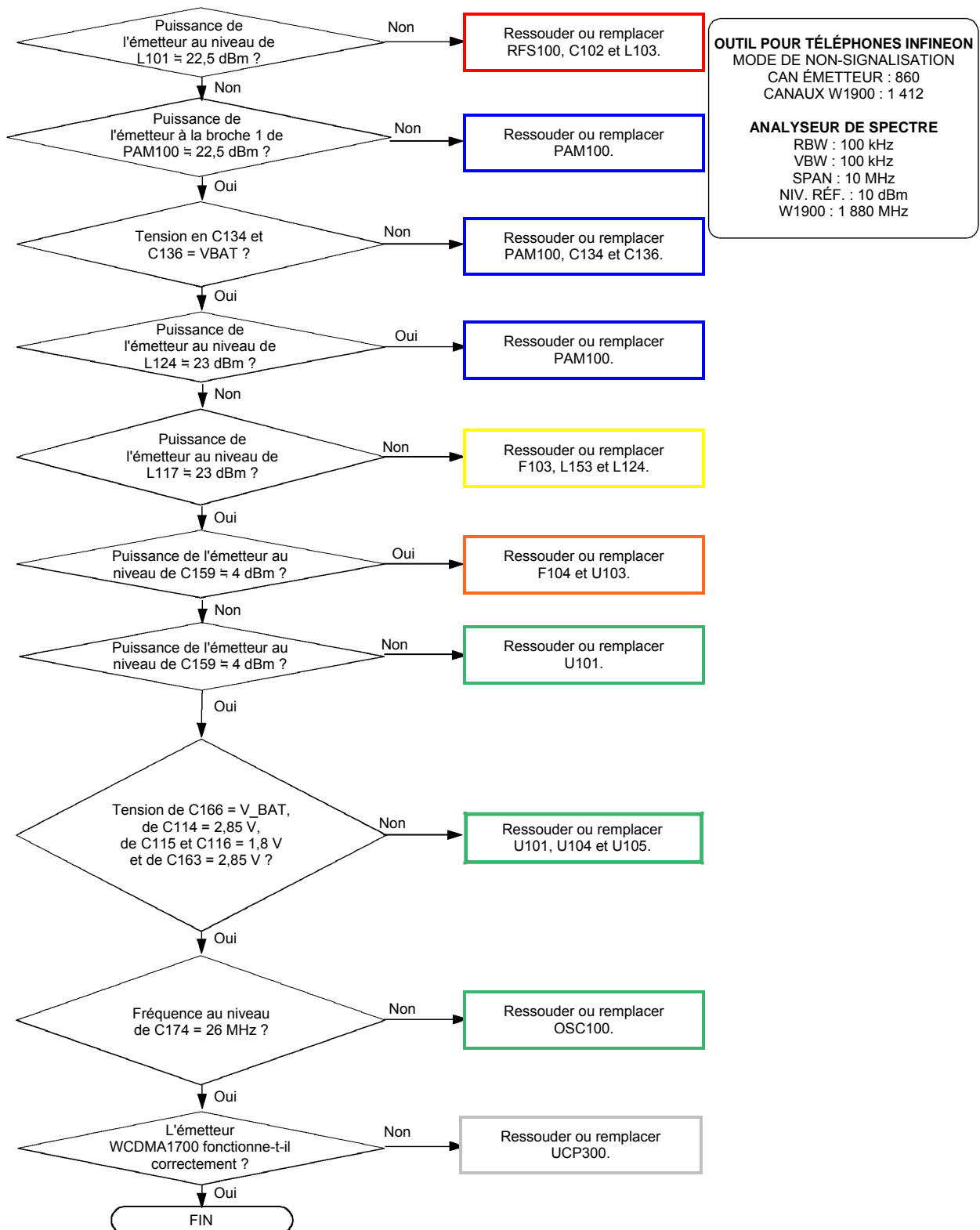


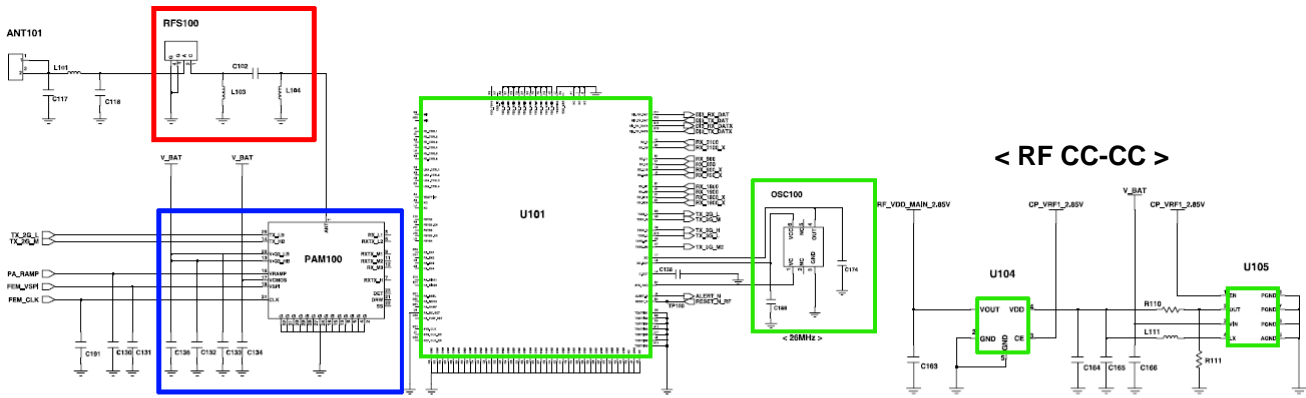
8b-3-21. Emetteur WCDMA2100



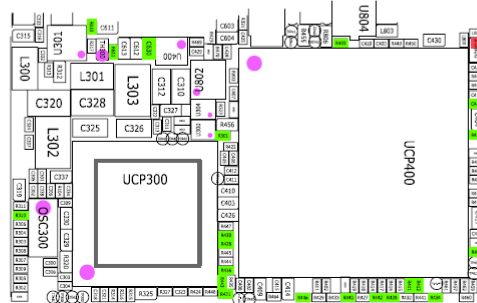
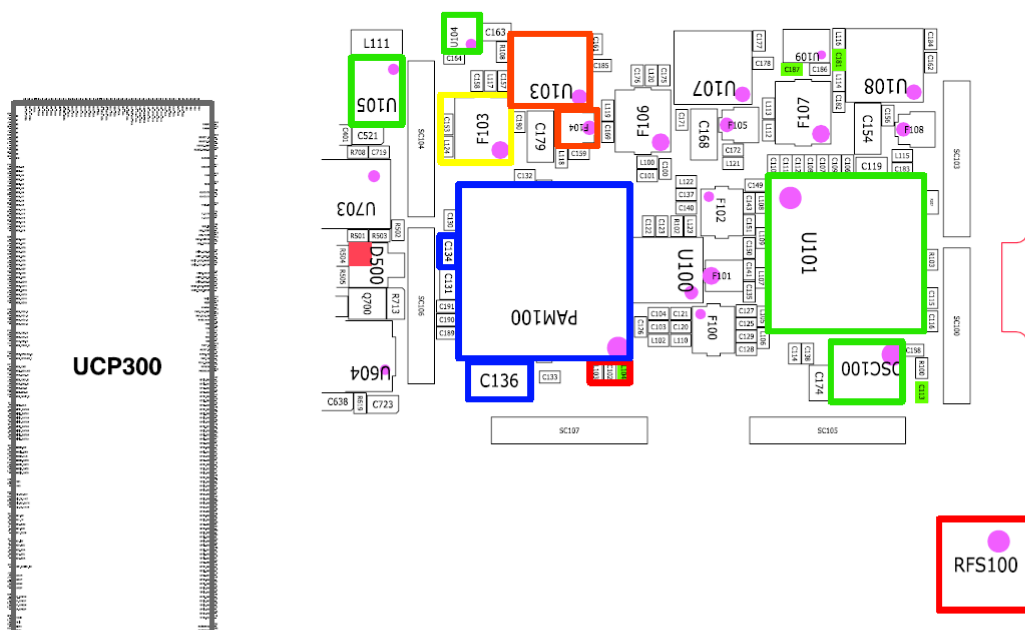
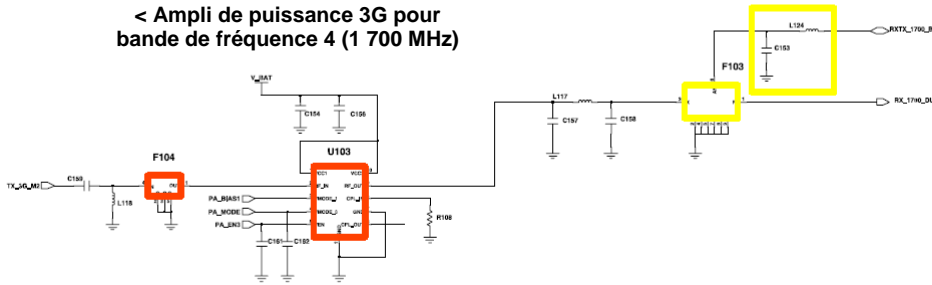


8b-3-22. Emetteur WCDMA1700

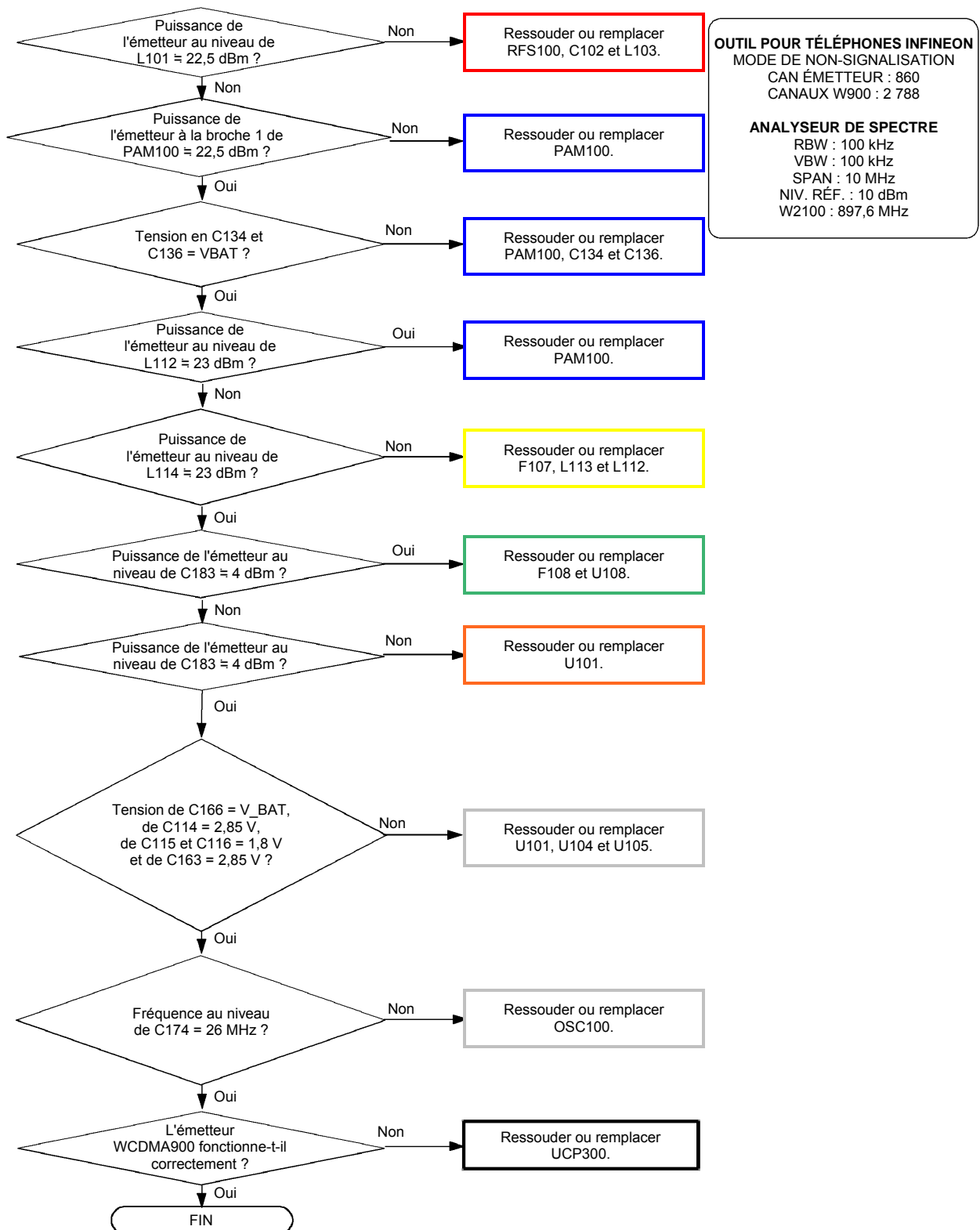


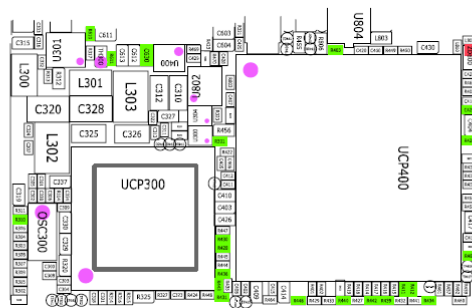
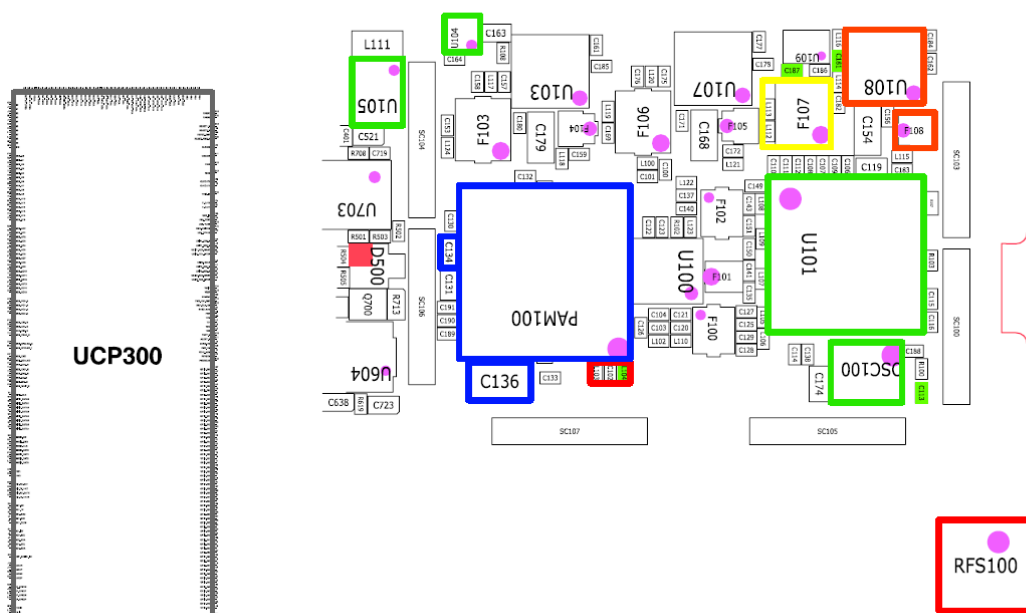
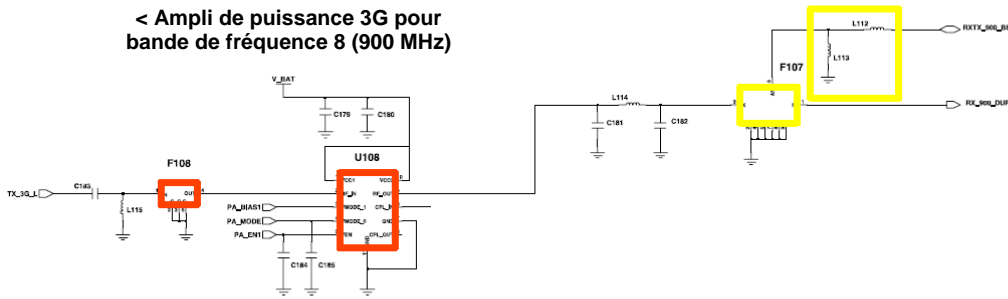
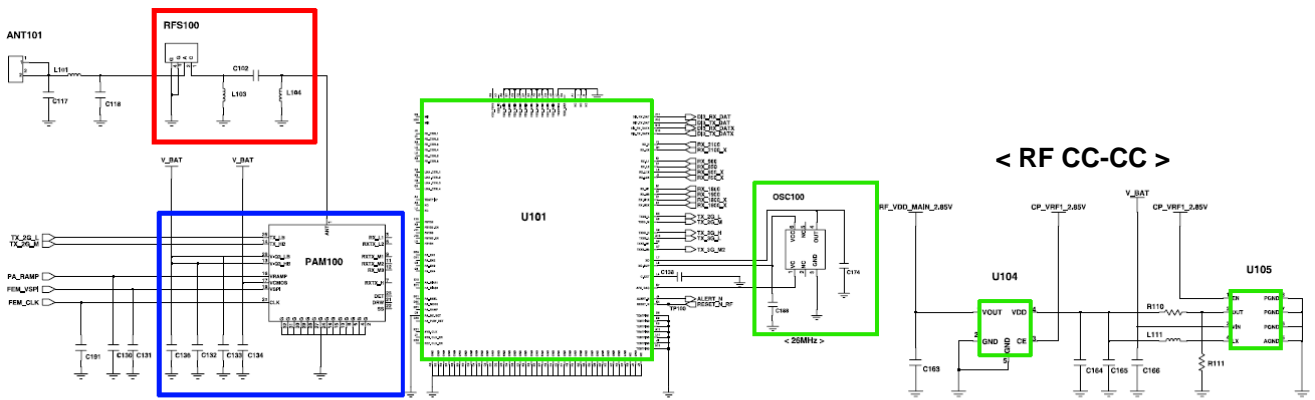


< Ampli de puissance 3G pour bande de fréquence 4 (1 700 MHz) >

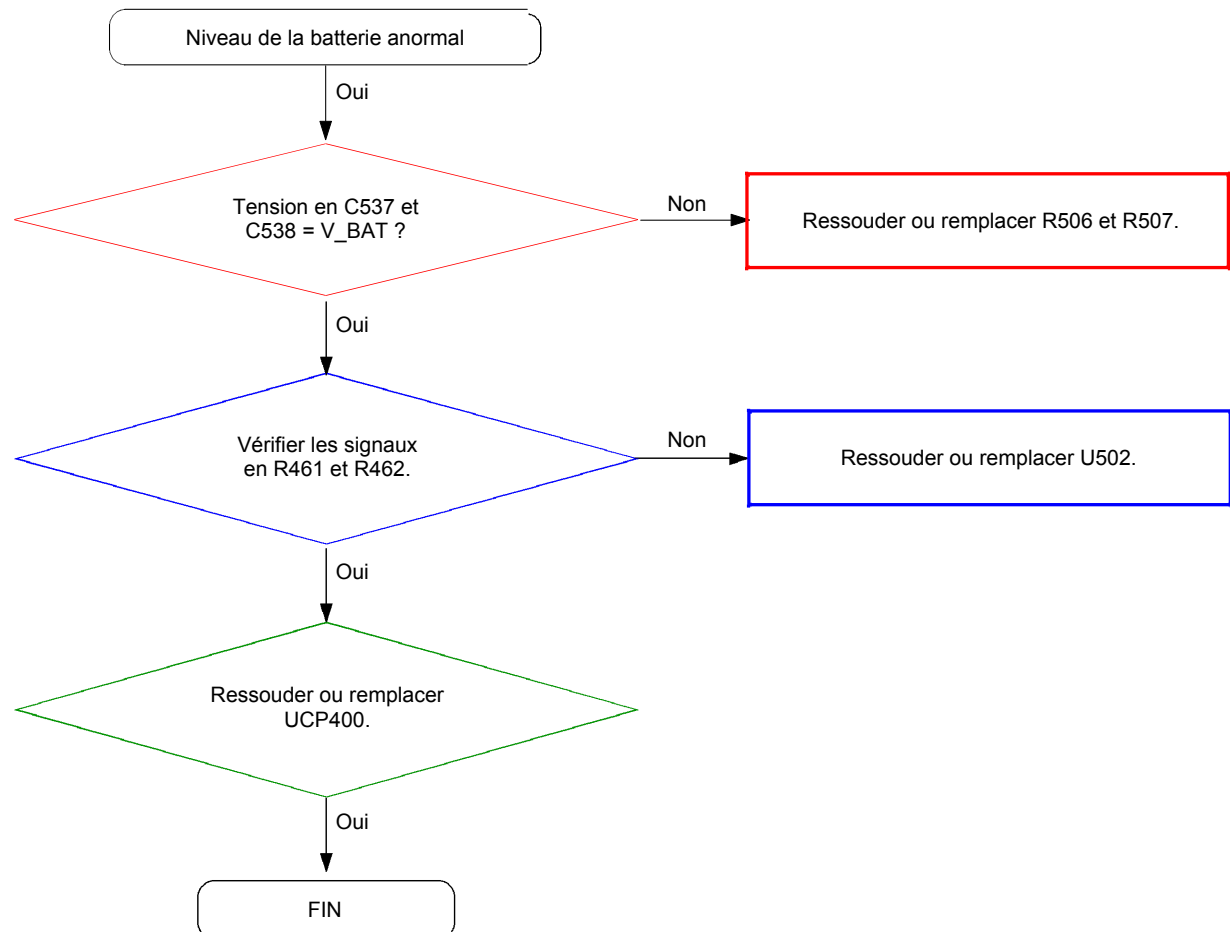


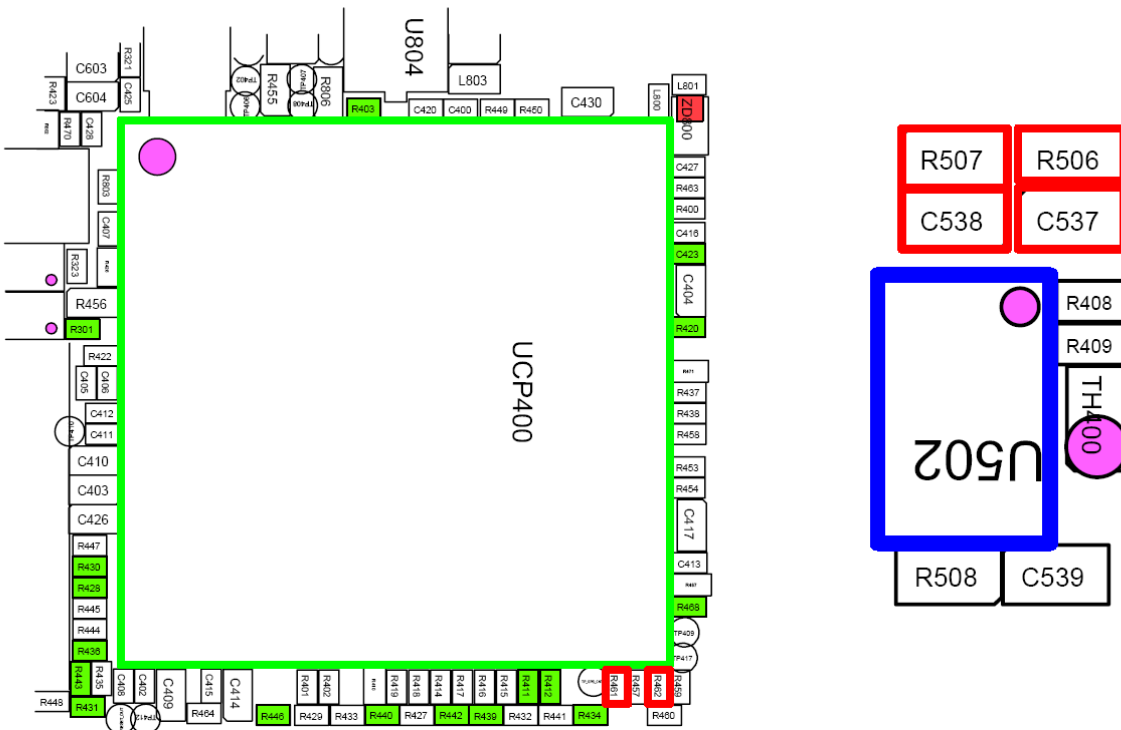
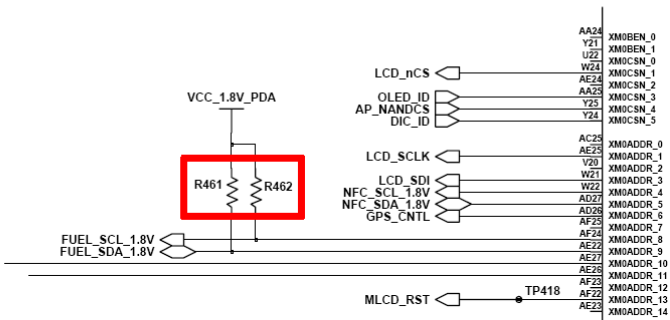
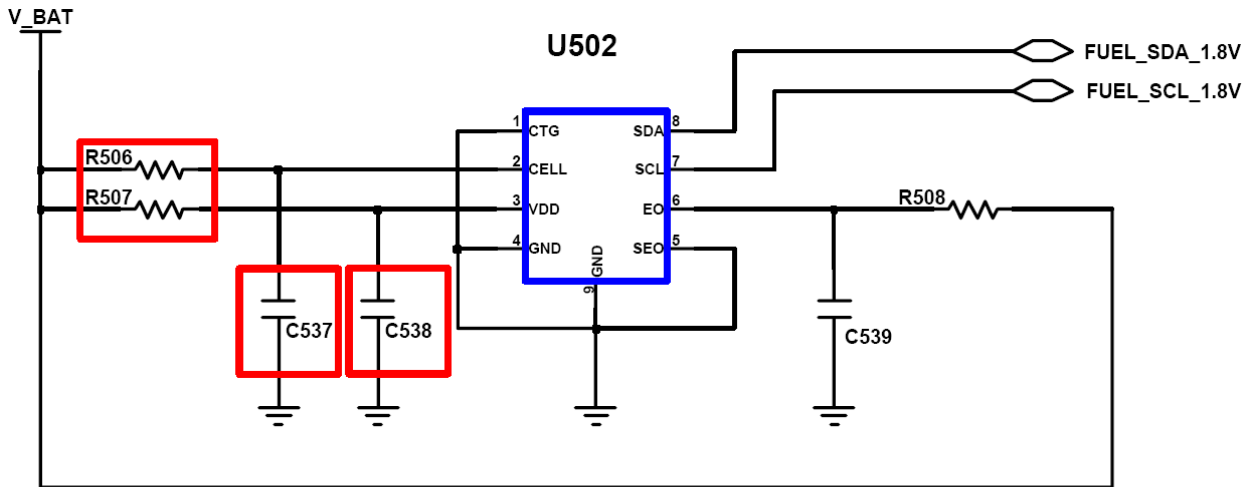
8b-3-23. Emetteur WCDMA900






8b-3-24. Section niveau de la batterie



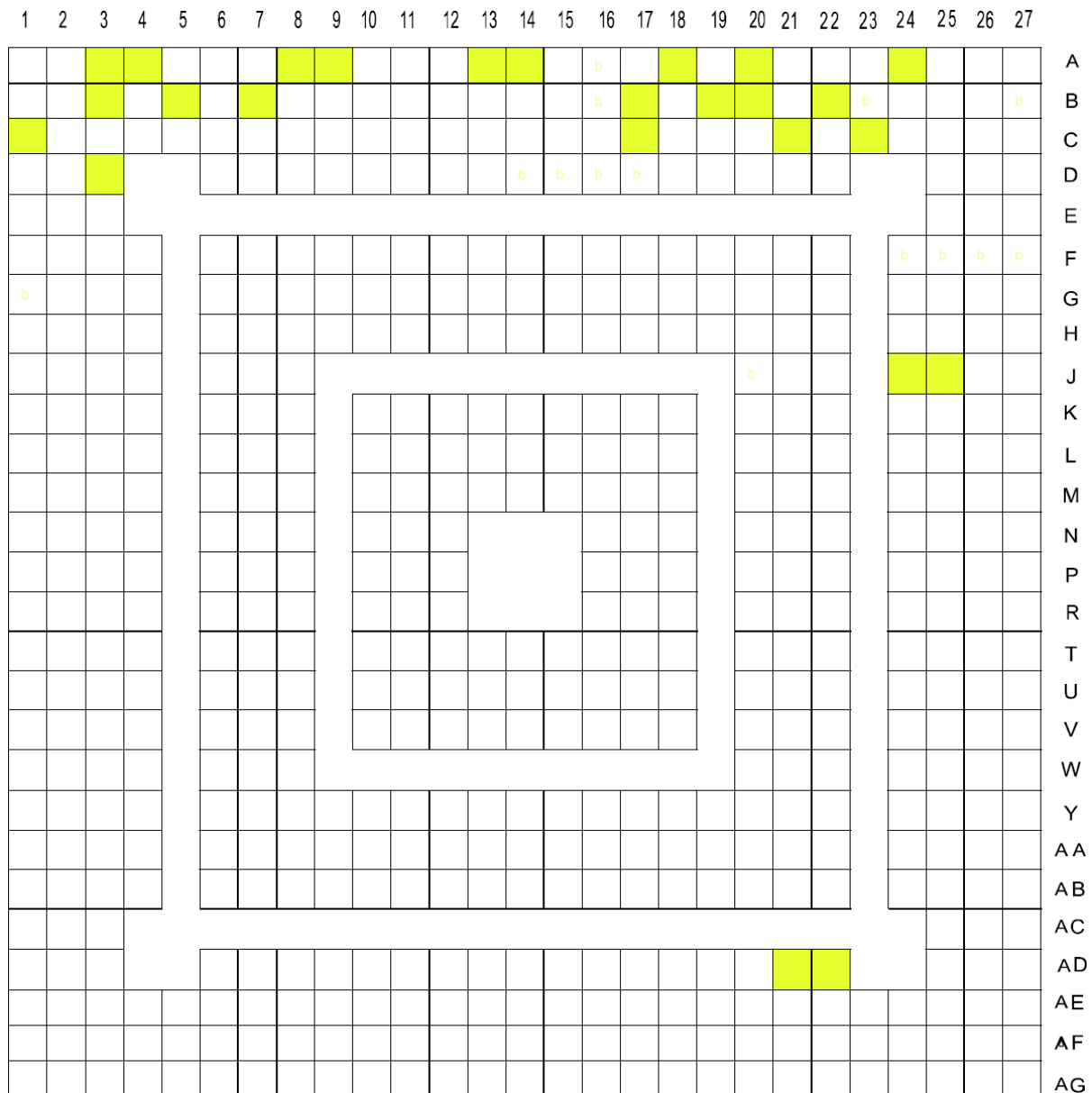


8b-4. Schémas de dépannage

- Point de non-connexion (vue du dessus) -

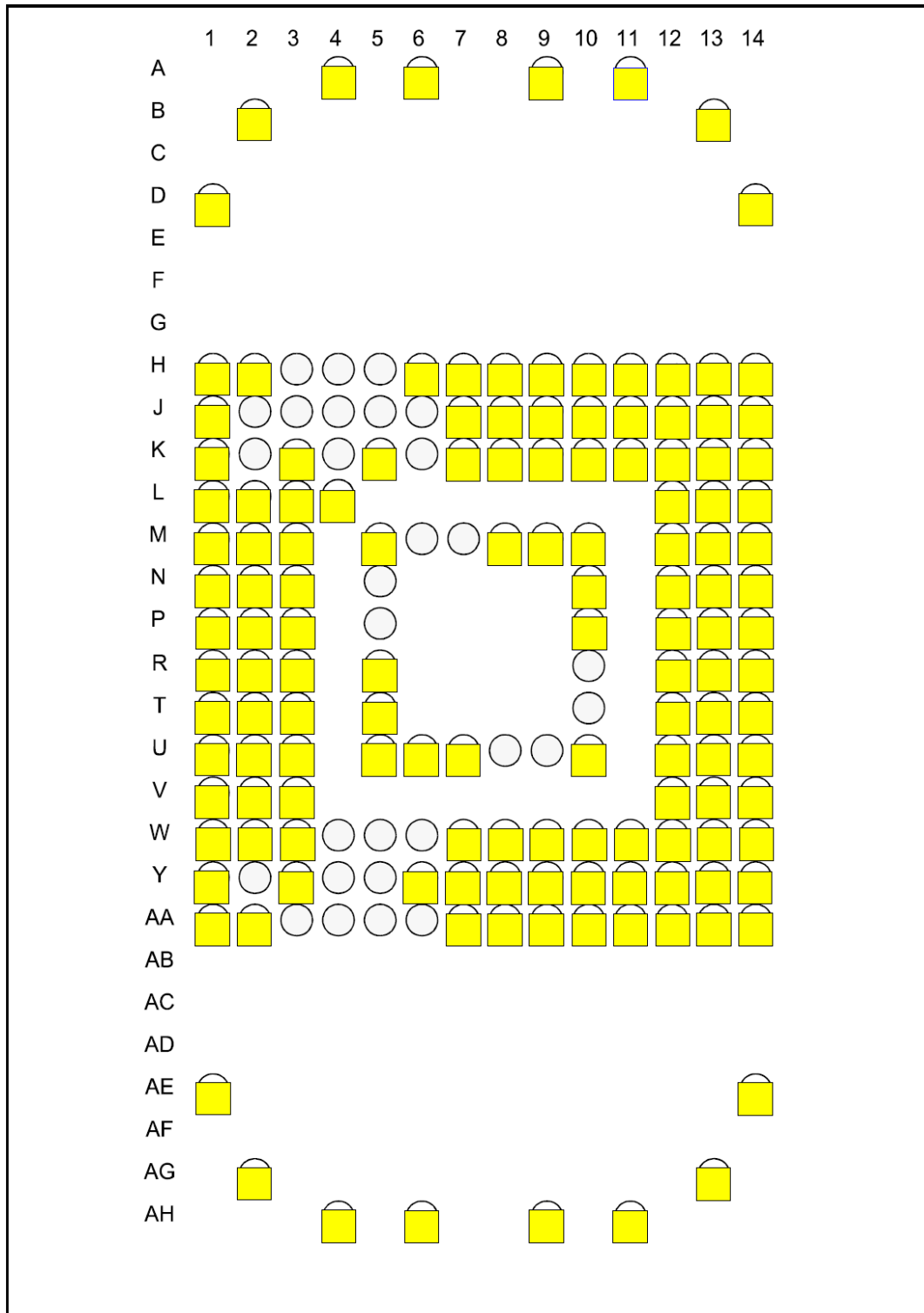
 : point de non-connexion

UCP400



⊙ : point de non-connexion

U303



9. Reference Abbreviate

Reference Abbreviate

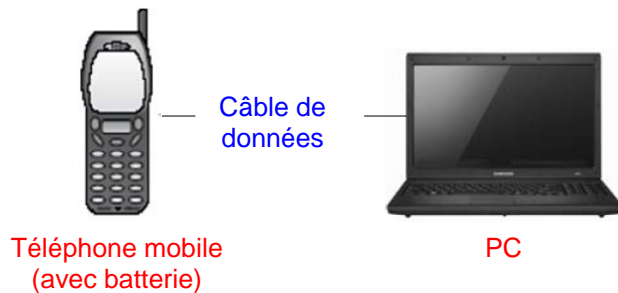
- **AAC**: Advanced Audio Coding.
- **AVC** : Advanced Video Coding.
- **BER** : Bit Error Rate
- **BPSK**: Binary Phase Shift Keying
- **CA** : Conditional Access
- **CDM** : Code Division Multiplexing
- **CI** : Carrier to Interference
- **DMB** : Digital Multimedia Broadcasting
- **EN** : European Standard
- **ES** : Elementary Stream
- **ETSI**: European Telecommunications Standards Institute
- **MPEG**: Moving Picture Experts Group
- **PN** : Pseudo-random Noise
- **PS** : Pilot Symbol
- **QPSK**: Quadrature Phase Shift Keying
- **RS** : Reed-Solomon
- **SI** : Service Information
- **TDM** : Time Division Multiplexing
- **TS** : Transport Stream

6. Réparation de niveau 1

6-1. Téléchargement des logiciels

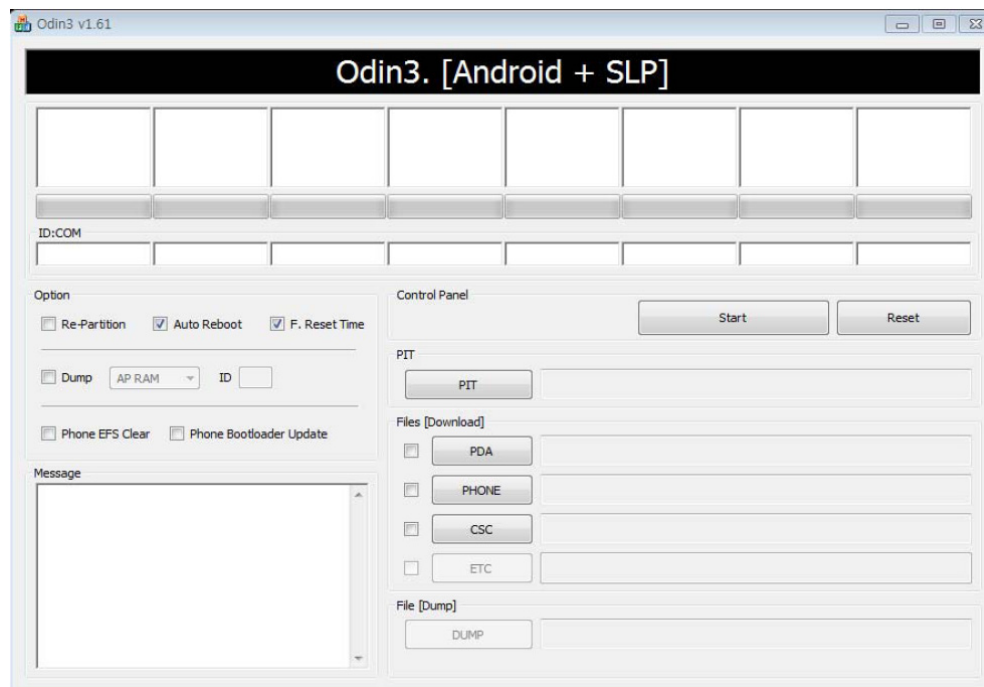
6-1-1. Conditions préalables au téléchargement des logiciels

- Schéma de raccordement



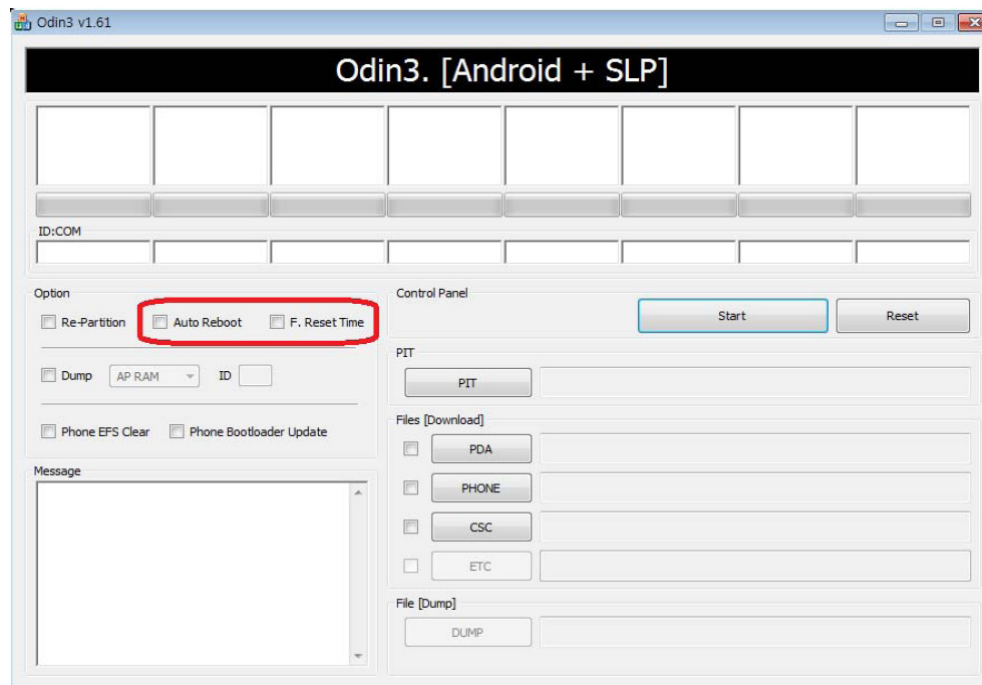
6-1-2. Procédure de téléchargement des logiciels

1. Exécutez le fichier "[Odin3 v1.61.exe](#)" pour charger le programme de téléchargement des fichiers binaires (téléchargeur).



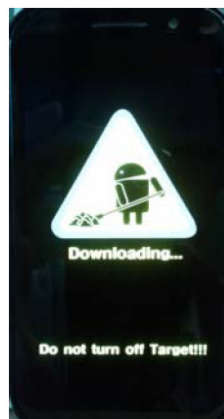
2. Sélectionnez les options.

- Désactivez toutes les cases à cocher de la section **Option** (Options).

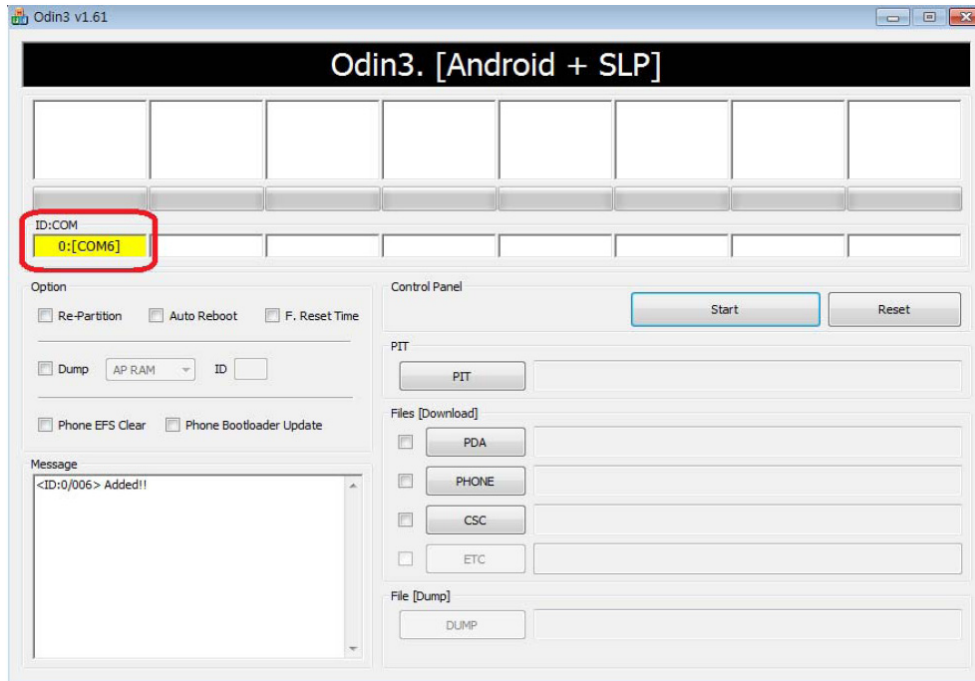


3. Accédez au mode de téléchargement du téléphone et branchez-le à l'ordinateur.

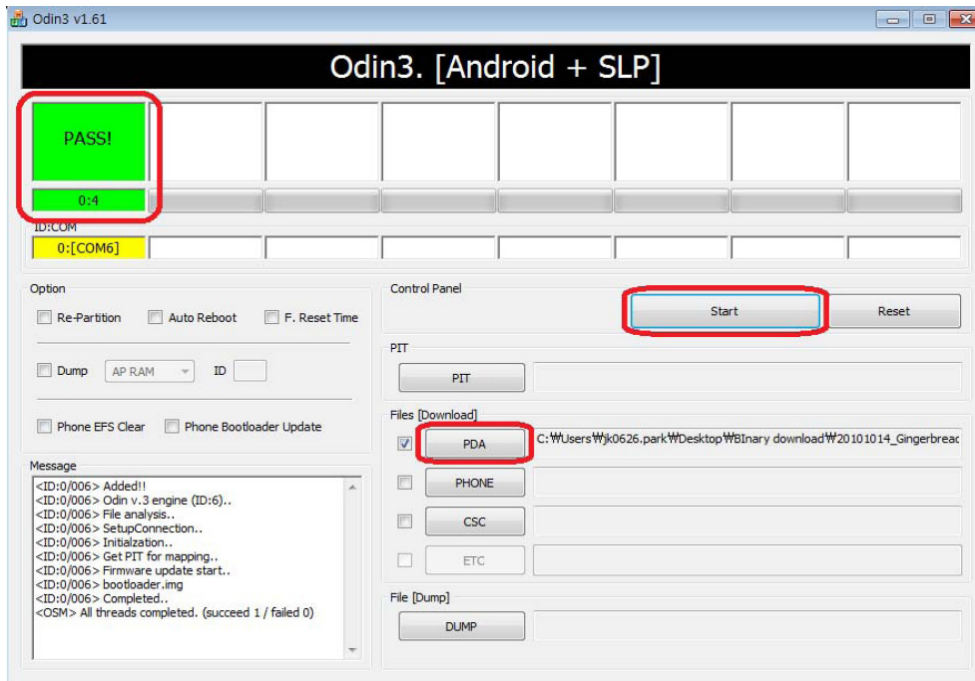
- ① Mettez le téléphone hors tension.
- ② Appuyez sur les touches Volume + et Volume -.
- ③ Branchez le téléphone (avec la batterie) à l'ordinateur à l'aide du câble de données tout en appuyant sur les touches Volume + et Volume -.
- ④ Lorsqu'il passe en mode de téléchargement, le téléphone affiche l'écran suivant.



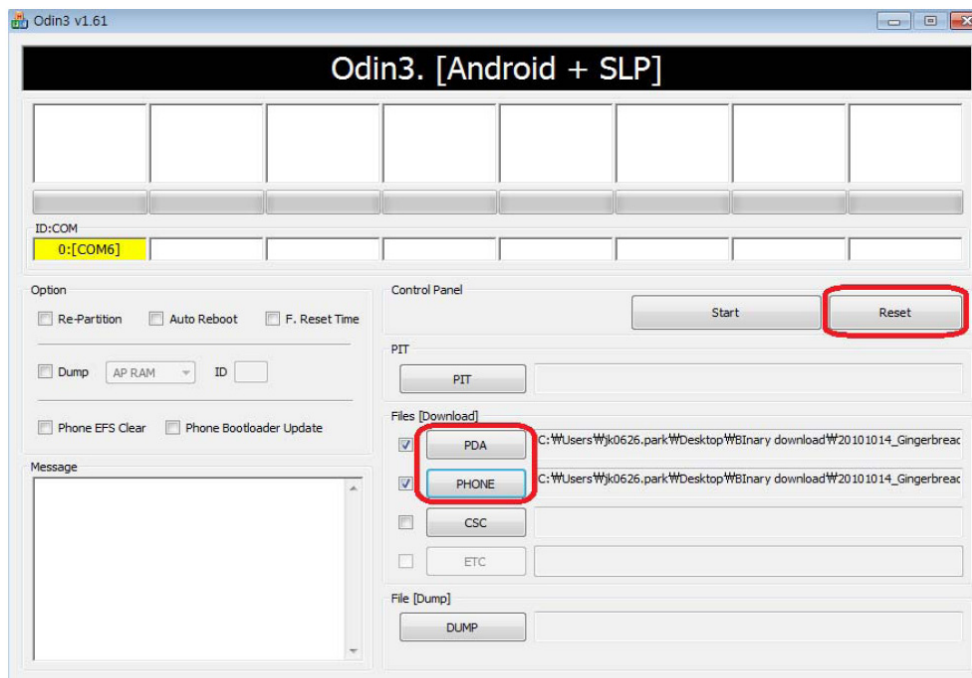
- Assurez-vous que la zone **ID:COM** s'affiche en surbrillance jaune indiquant que le téléphone est connecté à l'ordinateur.



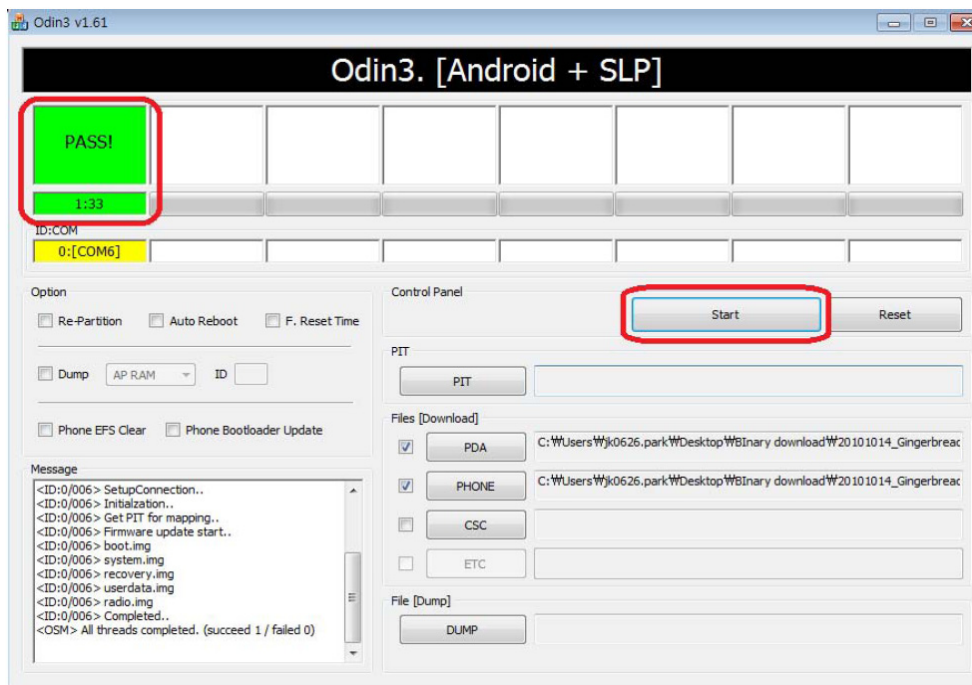
- Cliquez sur le bouton **PDA** et sélectionnez le fichier du chargeur de démarrage. Cliquez sur le bouton **Start** (Démarrer) pour lancer le téléchargement du fichier du chargeur de démarrage. Attendez ensuite que le message "PASS!" (Réussi) s'affiche à l'écran.



- Retirez la batterie, puis accédez à nouveau au mode de téléchargement du téléphone et branchez-le à l'ordinateur (voir étape 3).
- Cliquez sur le bouton **Reset** (Réinitialiser), puis sélectionnez les fichiers PDA et PHONE.



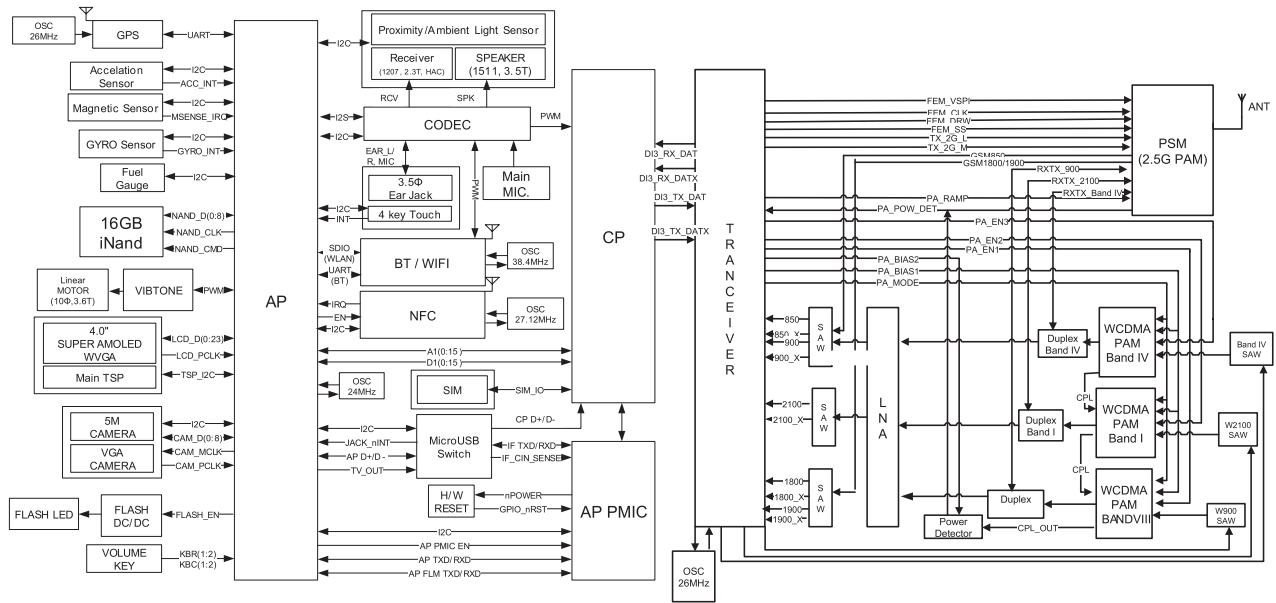
- Démarrez le téléchargement des fichiers PDA et PHONE en cliquant sur le bouton **Start** (Démarrer). Attendez ensuite que le message "PASS!" (Réussi) s'affiche à l'écran.



※ Attention : ne débranchez jamais le téléphone pendant le téléchargement des logiciels.

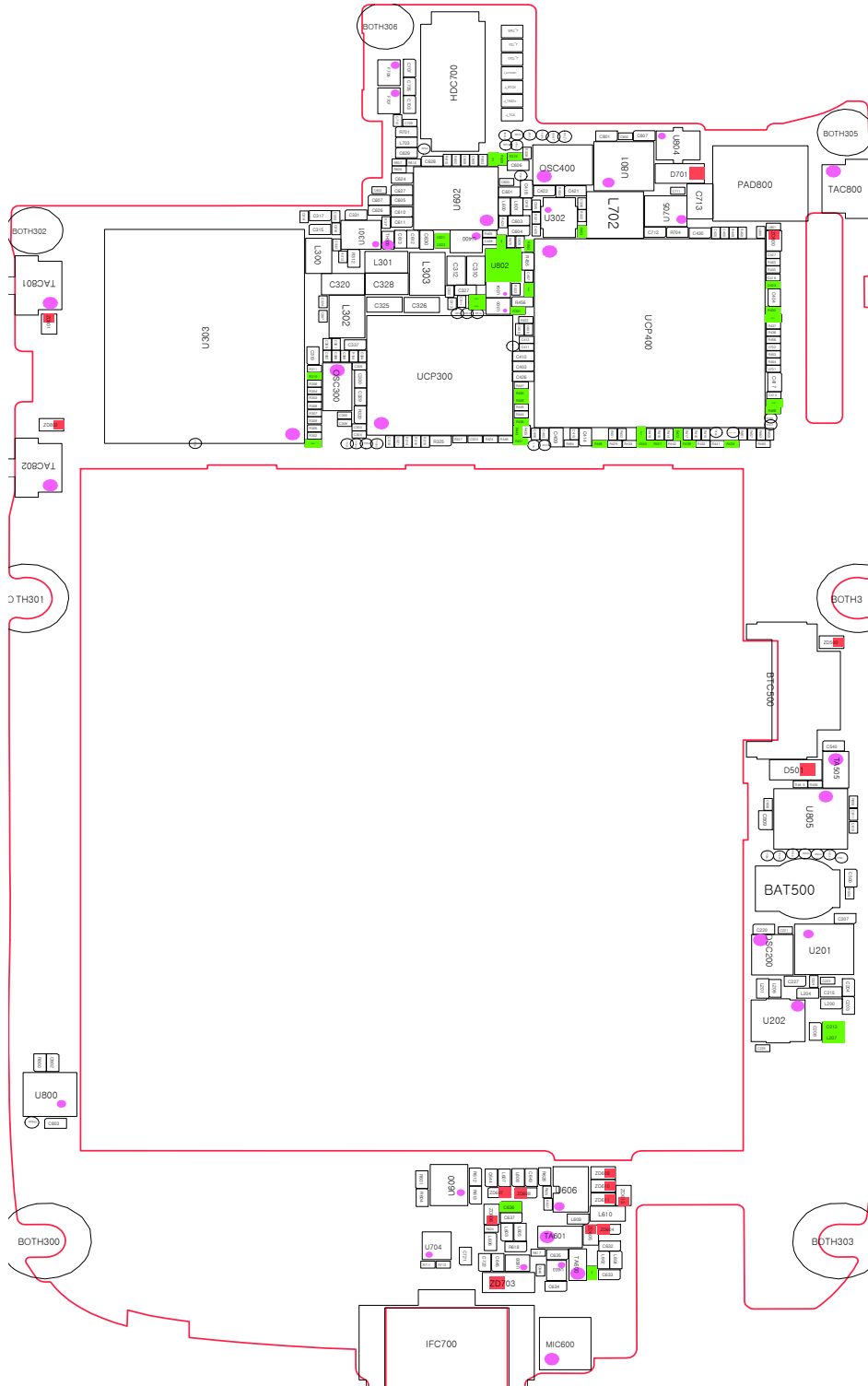
8. Level 3 Repair

8-1. Block Diagram

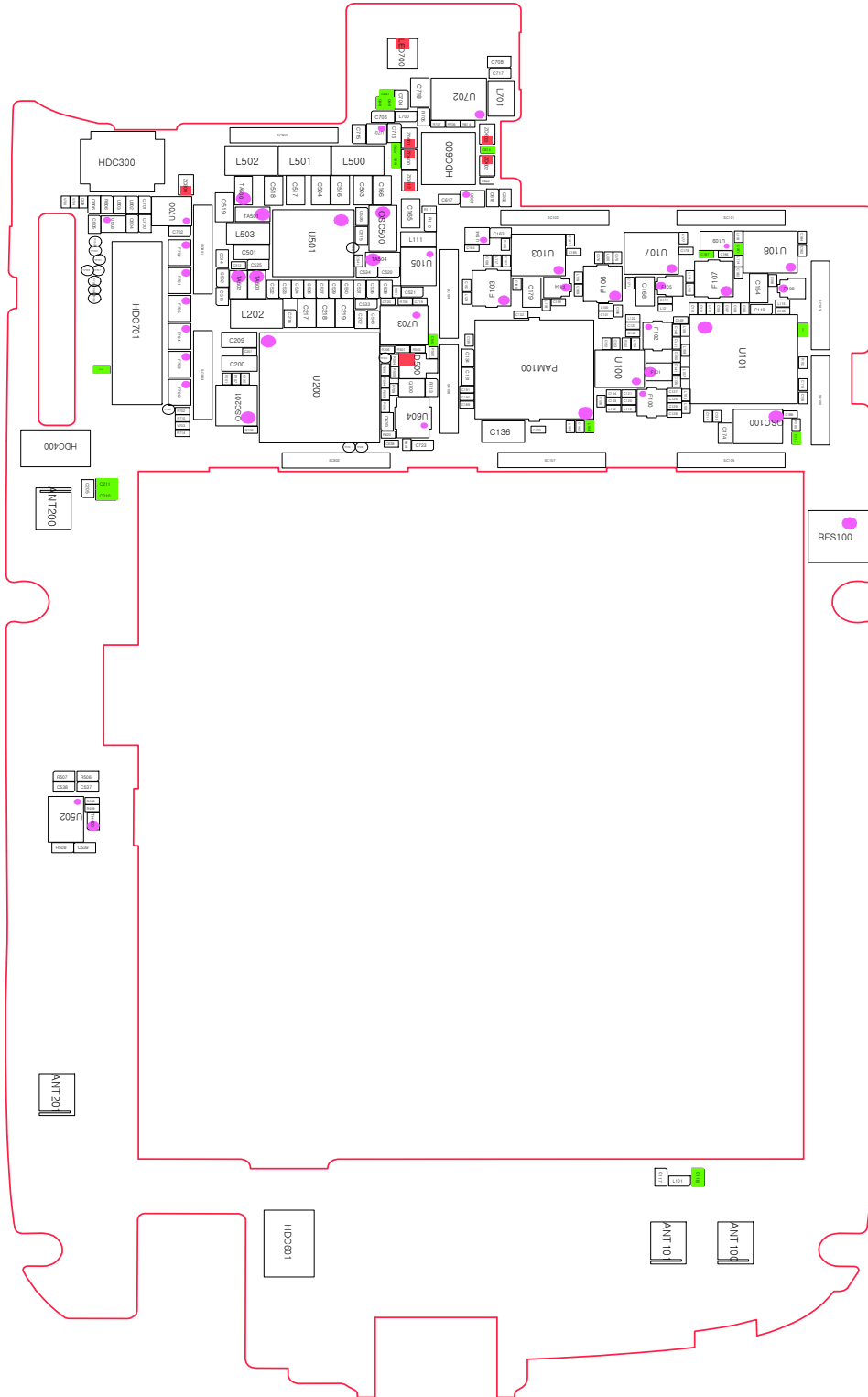


8a-2. PCB Diagrams

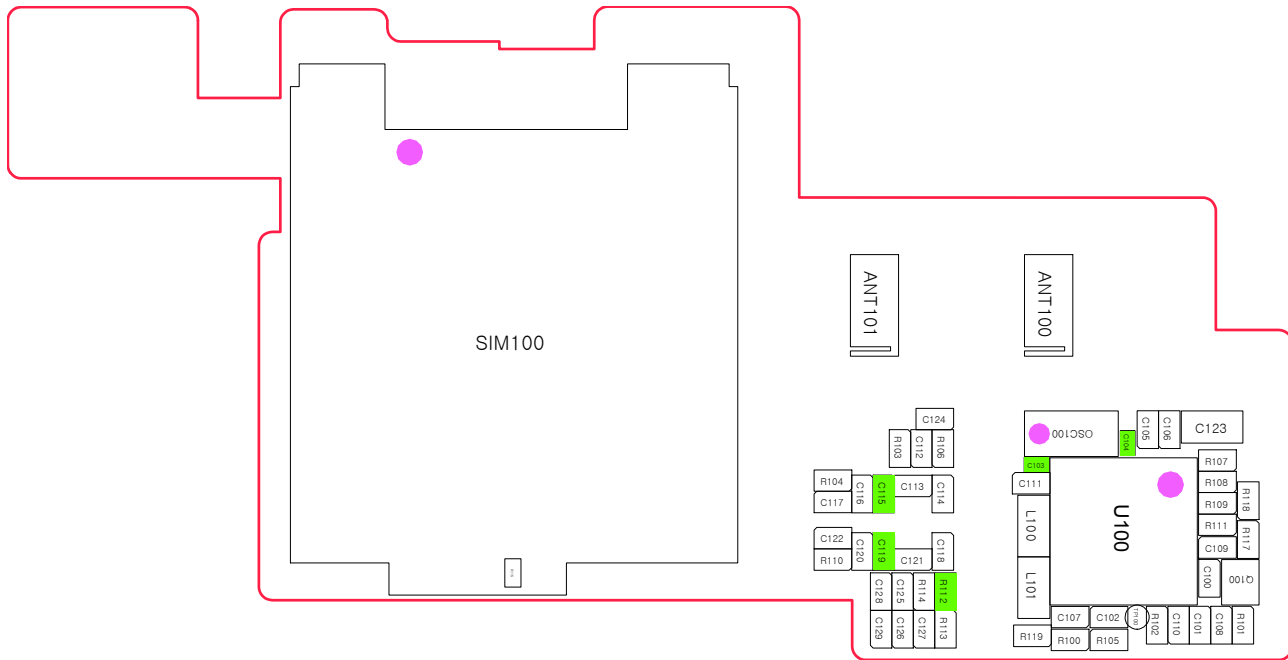
8a-2-1. Main Top



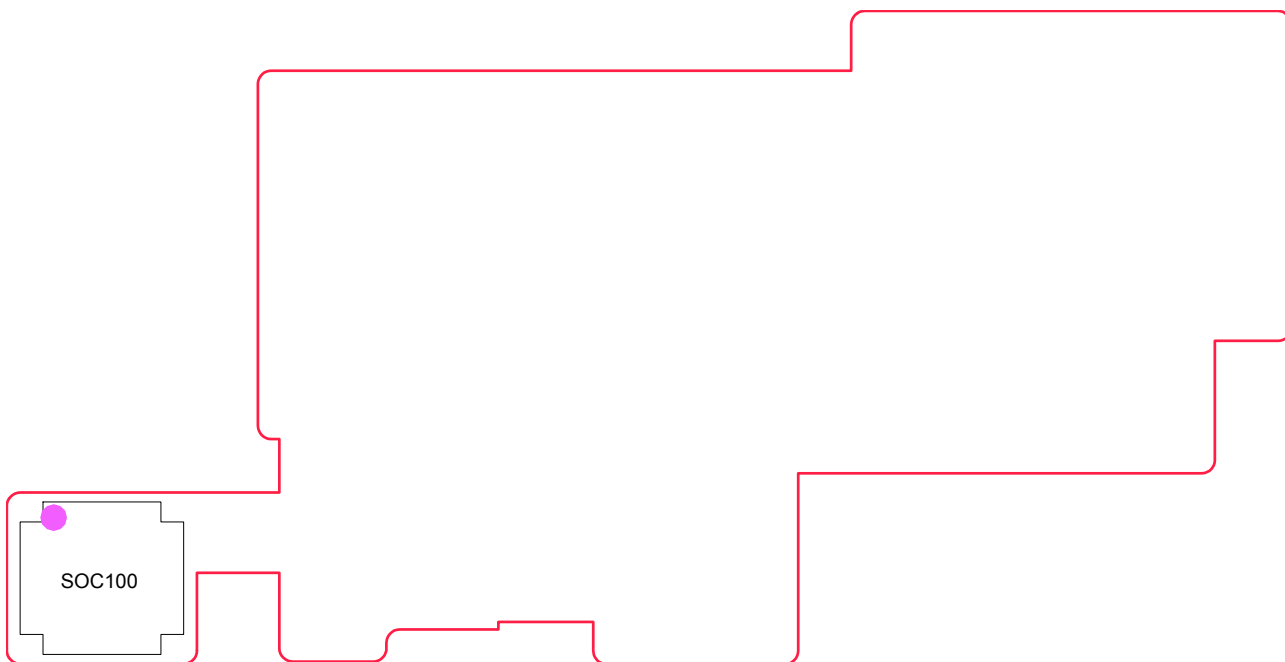
8a-2-1. Main Bottom



8a-2-1. Sub Top



8a-2-1. Sub Bottom



2. Spécifications

2-1. Spécifications générales GSM

	GSM850	EGSM900	DCS1800	PCS1900	WCDMA900	WCDMA1700	WCDMA2100
Bande de fréquences [MHz] Liaison ascendante / descendante	824 - 849 869 - 894	880 - 915 925 - 960	1 710 - 1 785 1 805 - 1 880	1 850 - 1 910 1 930 - 1 990	882,4 - 912,6 927,4 - 975,6	1 710 - 1 755 2 110 - 2 155	1 920 - 1 980 2 110 - 2 170
Plage ARFCN	128 - 251	0 - 124 et 975 - 1 023	512 - 885	512 - 810	LA : 2 712 - 2 863 LD : 2 937 - 3 088	LA : 1 312 - 1 513 LD : 1 537 - 1 738	LA : 9 612 - 9 888 LD : 10 562 - 10 838
Espacement émetteur / récepteur	45 MHz	45 MHz	90 MHz	80 MHz	45 MHz	400 MHz	190 MHz
Débit binaire / période binaire de modulation	270,833 kbit/s 3,692 µs	270,833 kbit/s 3,692 µs	270,833 kbit/s 3,692 µs	270,833 kbit/s 3,692 µs	3,84 Mbit/s (vitesse de transfert)	3,84 Mbit/s (vitesse de transfert)	3,84 Mbit/s (vitesse de transfert)
Intervalle de temps / période de trame	576,9 µs 4,615 ms	576,9 µs 4,615 ms	576,9 µs 4,615 ms	576,9 µs 4,615 ms	Longueur de trame : 10 ms Longueur de logement : 0,667 ms	Longueur de trame : 10 ms Longueur de logement : 0,667 ms	Longueur de trame : 10 ms Longueur de logement : 0,667 ms
Modulation	0,3 GMSK	0,3 GMSK	0,3 GMSK	0,3 GMSK	QPSK HPSK	QPSK HPSK	QPSK HPSK
Puissance SM	33 à 5 dBm	33 à 5 dBm	30 à 0 dBm	30 à 0 dBm	24 à -50 dBm	24 à -50 dBm	24 à -50 dBm
Classe de puissance	4 (+33 dBm max.)	4 (+33 dBm max.)	1 (+30 dBm max.)	1 (+30 dBm max.)	3 (+24 dBm max.)	3 (+24 dBm max.)	3 (+24 dBm max.)
Sensibilité	-102 dBm	-102 dBm	-100 dBm	-100 dBm	-103,7 dBm	-106,7 dBm	-106,7 dBm
Multiplexage TDMA	8	8	8	8	-	-	-
Rayon de cellule	35 km	35 km	2 km	2 km	2 km	2 km	2 km

2-2. Classe de puissance de l'émetteur GSM

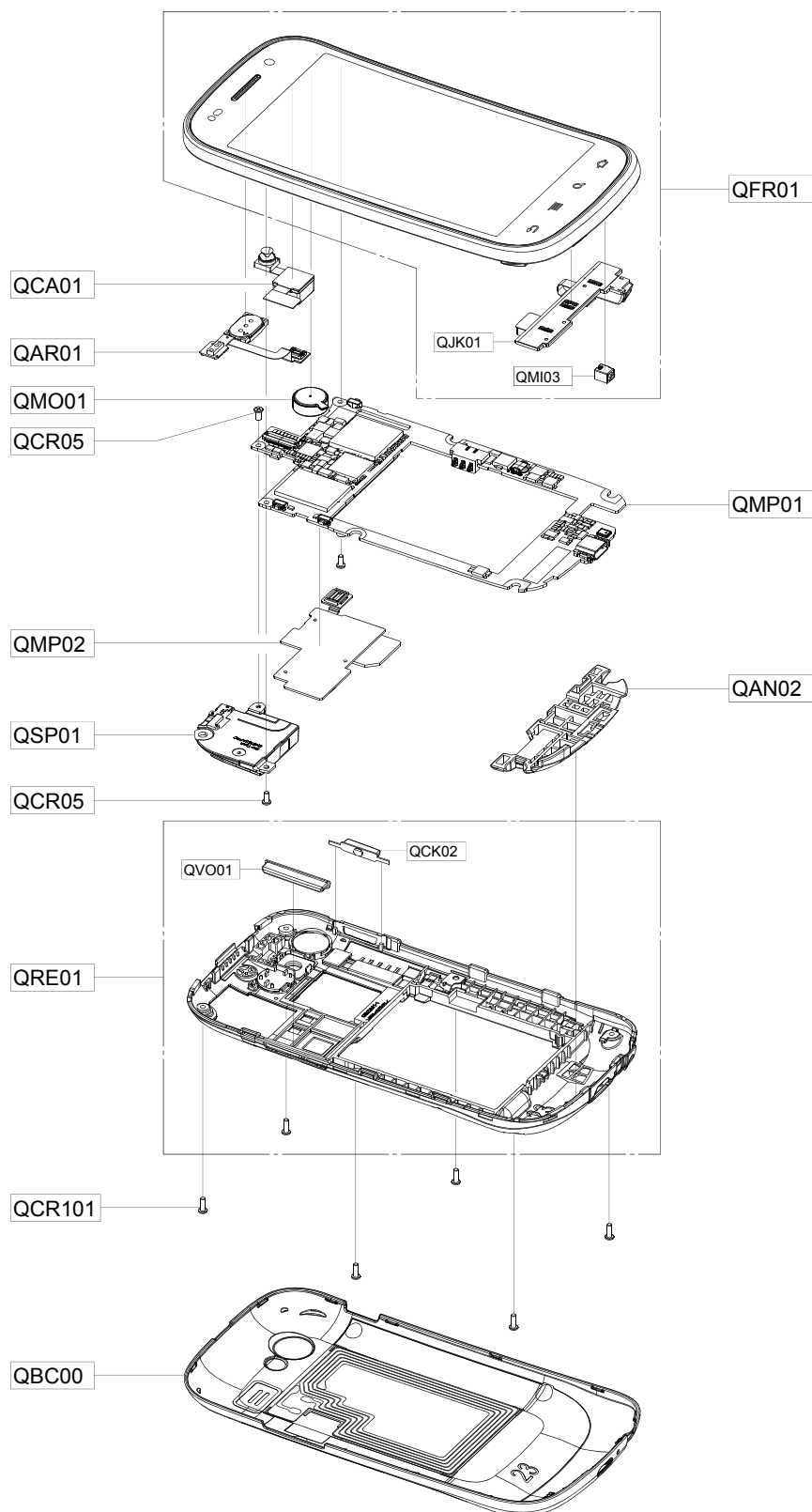
Niveau de commande de la puissance d'émission	GSM850	Niveau de commande de la puissance d'émission	GSM900	Niveau de commande de la puissance d'émission	DCS1800	Niveau de commande de la puissance d'émission	PCS1900
5	33 ± 2 dBm	5	33 ± 2 dBm	0	30 ± 3 dBm	0	30 ± 3 dBm
6	31 ± 2 dBm	6	31 ± 2 dBm	1	28 ± 3 dBm	1	28 ± 3 dBm
7	29 ± 2 dBm	7	29 ± 2 dBm	2	26 ± 3 dBm	2	26 ± 3 dBm
8	27 ± 2 dBm	8	27 ± 2 dBm	3	24 ± 3 dBm	3	24 ± 3 dBm
9	25 ± 2 dBm	9	25 ± 2 dBm	4	22 ± 3 dBm	4	22 ± 3 dBm
10	23 ± 2 dBm	10	23 ± 2 dBm	5	20 ± 3 dBm	5	20 ± 3 dBm
11	21 ± 2 dBm	11	21 ± 2 dBm	6	18 ± 3 dBm	6	18 ± 3 dBm
12	19 ± 2 dBm	12	19 ± 2 dBm	7	16 ± 3 dBm	7	16 ± 3 dBm
13	17 ± 2 dBm	13	17 ± 2 dBm	8	14 ± 3 dBm	8	14 ± 3 dBm
14	15 ± 2 dBm	14	15 ± 2 dBm	9	12 ± 4 dBm	9	12 ± 4 dBm
15	13 ± 2 dBm	15	13 ± 2 dBm	10	10 ± 4 dBm	10	10 ± 4 dBm
16	11 ± 3 dBm	16	11 ± 3 dBm	11	8 ± 4 dBm	11	8 ± 4 dBm
17	9 ± 3 dBm	17	9 ± 3 dBm	12	6 ± 4 dBm	12	6 ± 4 dBm
18	7 ± 3 dBm	18	7 ± 3 dBm	13	4 ± 4 dBm	13	4 ± 4 dBm
19	5 ± 3 dBm	19	5 ± 3 dBm	14	2 ± 5 dBm	14	2 ± 5 dBm
				15	0 ± 5 dBm	15	0 ± 5 dBm

4-2. Cellular phone Parts list

Design LOC		Description	SEC CODE
QCR05		SCREW-MACHINE	6001-001478
QCR05		SCREW-MACHINE	6001-001478
QCR101		SCREW-MACHINE	6001-002005
QMO01		MOTOR LINEAR VIBRATION-GT-I9020	GH31-00515A
QAN02		INTENNA-GT_I9023 MAIN	GH42-02898A
QSP01		MODULE-SPK(GT_I9020)	GH59-10341A
QAR01		MODULE-RCV+SENSOR(GT_I9020)	GH59-10342A
QCA01		CAMERA MODULE-GT_I9020 5M+VGA	GH59-10347A
QMP02		A/S ASSY-PBA SUB(TMB) GT_I9020T	GH82-05342A
QMP01		A/S ASSY-PBA MAIN(COMM)GT_I9023	GH82-05598A
QBC00		ASSY COVER-BATT(OPEN/BLK)	GH98-19166A
QFR01		MEA FRONT-GT-I9023(EU/BLK)	GH97-12010A
	QJK01	MODULE-EARJACK RFPCB(GT_I9023)	GH59-10702A
	QMI03	ASSY RUBBER-MIC HOLDER	GH98-18759A
QRE01		ASSY CASE-REAR	GH98-19165A
	QVO01	PMO KEY-VOLUME	GH72-61504A
	QCK02	PMO KEY-POWER	GH72-61506A

4. Exploded View and Parts List

4-1. Cellular phone Exploded View



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